91/10/30修訂

**行政院國家科學委員會個人資料表**

以下各項資料均將收錄於國科會資料庫內，其中有關個人的姓名,服務機關, 連絡電話(公)及論文著述等, 將公開於本會網際網路「研究人員」項下, 提供外界查詢。至於其他如傳真, E-mail, 學歷, 經歷, 專長等資料,為尊重個人意願, 請圈選（同意）於網際網路上提供外界查詢。（如已往已經表示過意見者，可不必再勾選）。

1. 基本資料 簽 名：

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 身份證號碼 | | | \* | \* | \* | \* | \* | \* | \* | 2 | 6 | 4 | 填表日期： | | | | | | 2024/12/20 | |
| 中文姓名 | | 傅楸善 | | | | | | | | | | 英文姓名 | | | Fuh, Chiou-Shann | | | | | |
| (Last Name) (First Name) (Middle Name) | | | | | |
| 國籍 | 中華民國 | | | | | | | | | | | | | 性別 | ■男□女 | | | 出生日期 | | 1961年8 月2 日 |
| 聯絡地址 | | 106 台北市羅斯福路四段一號 國立臺灣大學資訊工程所 | | | | | | | | | | | | | | | | | | |
| 聯絡電話 | | (公) (02) 2362-5336 x 327 | | | | | | | | | | | | | | (宅/手機) (02) 2680-6582 | | | | |
| 傳真號碼 | | (02) 2362-8167 | | | | | | | | | | | | | | | E-MAIL | fuh@csie.ntu.edu.tw | | |

1. 主要學歷 由最高學歷依次填寫，若仍在學者，請在學位欄填「肄業」。

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 學校名稱 | 國別 | 主修學門系所 | 學位 | 起訖年月(西元年/月) |
| 哈佛大學 | 美國 | 計算機科學 | 博士 | 1987/09 至 1992/06 |
| 賓州州立大學 | 美國 | 計算機科學 | 碩士 | 1985/09 至 1987/09 |
| 國立台灣大學 | 中華民國 | 資訊工程 | 學士 | 1979/09 至 1983/06 |
|  |  |  |  |  |

1. 現職及與專長相關之經歷 指與研究相關之專任職務，請依任職之時間先後順序由最近者往前追溯。

|  |  |  |  |
| --- | --- | --- | --- |
| 服務機關 | 服務部門／系所 | 職稱 | 起訖年月(西元年/月) |
| 現職：國立台灣大學 | 資訊工程學系 | 教授 | 2000/ 08 至 今 |
| [IJPRAI: International Journal of Pattern Recognition and Artificial Intelligence](https://www.worldscientific.com/page/ijprai/editorial-board) | 2020 SCI Impact Factor 1.373 | Associate Editor | 2021/ 01 至 今 |
| [JRTIP: Journal of Real-Time Image Processing](https://www.springer.com/journal/11554/editors) | 2020 SCI Impact Factor 2.358 | Associate Editor | 2021/ 04 至 今 |
| 經歷：國立台灣大學 | 資訊工程學系 | 副教授 | 1993/02 至 2000/07 |
| AT&T Bell Lab. | Network Management Dept. | Contractor | 1992/06 至 1993/02 |

四、專長 請自行填寫與研究方向有關之學門及次領域名稱。

|  |  |  |  |
| --- | --- | --- | --- |
| 1. EB, 資訊二(影像與圖形辨識) | 1. EH, 生產自動化技術 |  |  |

表C301 共 頁 第 頁

五. 論文著述:

1. 請詳列個人最近五年內發表之學術性著作, 包括: 期刊論文, 專書及專書論文, 研討會論文, 技術報告及其他等, 並請依各類著作之重要性自行排列先後順序。
2. 各類著作請按發表時間先後順序填寫。各項著作請依作者姓名 (按原出版之次序), 出版年, 月份, 題目, 期刊名稱 (專書出版社), 起訖頁數之順序填寫, 被接受刊登尚未正式出版者請附被接受函。
3. 若期刊屬於 SCI, EI, SSCI 或 A&HCI 等時, 請註明; 若著作係經由國科會補助之研究計畫所產生, 請於最後填入相關之國科會計畫編號。
4. 論文著述(表C302), 請採 MS Word 97(含)以上版本輸入資料, 並將輸入的檔案以E-Mail方式傳遞本會。E-Mail位址: nscapply@nsc.gov.tw, Mail之主旨請註明 C302, “身份證號碼” 。

## Book Chapter

C. H. Huang, Y. Sun, and C. S. Fuh, “Vehicle License Plate Recognition with Deep Learning,” *Technologies to Advance Automation in Forensic Science and Criminal Investigation*, IGI Global, Hershey, PA, Chapter 9, pp. 161-219, 2021.

C. W. Chen and C. S. Fuh, “[Lens Shading Correction for Dirt Detection](http://www.csie.ntu.edu.tw/~fuh/personal/LensShadingCorrectionforDirtDetection.pdf),” Ed. P. S. P. Wang, *Pattern Recognition, Machine Intelligence and Biometrics*, Springer, Heidelberg, Chapter 7, pp. 171-195, 2011.

NSC 98-2221-E-002-150-MY3, NSC 95-2221-E-002-276-MY3

J. M. Wang, W. Y. Liao, S. W. Chen, and C. S. Fuh, “[Multi-View People Counting System–Pedestrian Representation](http://www.csie.ntu.edu.tw/~fuh/personal/MultiViewPeopleCountingSystemPedestrian.pdf),” Ed. P. S. P. Wang, *Pattern Recognition and Machine Vision*, River Publishers, Wharton, Texas, Chapter 18, pp. 277-292, 2010.

## International Journal

C. P. Fu, M. J. Yu, Y. S. Huang, C. S. Fuh, and R. F. Chang, “[Stratifying High-Risk Thyroid Nodules Using a Novel Deep Learning System](https://www.csie.ntu.edu.tw/~fuh/personal/StratifyingHigh-RiskThyroidNodulesUsingaNovelDeepLearningSystem.pdf),” *Experimental and Clinical Endocrinology and Diabetes*, Vol. 131, pp. 1-7, 2023.

SCI 1.8 (2023: Endocrinology & Metabolism - SCIE 132/145), MOST 110–2221-E-002–122-MY3, MOST 110–2221-E-002–123-MY3

J. Y. Hung, A. C. Luo, Y. S. Deng, C. Y. Chung, C. S. Fuh, C. Perera, D. Myung, A. Kossler, and S. L. Liao, “[Automated Detection of Dysthyroid Optic Neuropathy in Graves’ Ophthalmopathy with Computed Tomography (CT) Scans by Convolutional Neural Networks](https://iovs.arvojournals.org/article.aspx?articleid=2790572),” *Investigative Ophthalmology & Visual Science*, Vol. 64, No. 8, p. 2394, 2023.

SCI 4.925 (2023: Ophthalmology - SCIE 10/62),

C. K. Chen, T. Y. Wu, Y. C. Liao, C. S. Fuh, K. H. Chen, P. W. Weng, J. Y. Wang, C. Y. Chen, Y. M. Huang, C. P. Chen, Y. L. Chu, K. L. Yeh, C. H. Yu, H. K. Wu, W. P. Lin, T. H. Liou, M. S. Wu, and C. K. Liaw, “[Mathematical Model of Distal Radius Orientation](https://www.csie.ntu.edu.tw/~fuh/personal/MathematicalModelofDistalRadiusOrientation.pdf),” *Frontiers in Surgery*, DOI 10.3389/fsurg.2022.1000404, pp. 1-4, 2022.

SCI 2.568 (2022: Surgery - SCIE 99/212),

K. W. Chen, P. Chandrashan, H. K. Chiu, A. L. Kossler, D. Myung, C. S. Fuh, C. R. Hsu, M. C. Tseng, S. L. Liao, and J. Y. Hung, “[Automatic Blepharoptosis Measurement by Iris Edge Detection with a Deep Learning Model](https://iovs.arvojournals.org/article.aspx?articleid=2782155),” *Investigative Ophthalmology & Visual Science*, Vol.63, 172 – F0019, p. 1, 2022.

SCI 4.925 (2022: Ophthalmology - SCIE 10/61),

C. S. Fuh and T. C. Tung, “[MCPA: A Fast Single Image Haze Removal Method Based on the Minimum Channel and Patchless Approach](https://www.csie.ntu.edu.tw/~fuh/personal/MCPA.AFastSingleImageHazeRemovalMethodBasedontheMinimumChannelandPatchlessApproach.pdf),” *IEEE Access,* Vol. 10, pp. 73033-73045, DOI: 10.1109/ACCESS.2022.3188774, 2022.

SCI 3.476 (2022: Computer Science, Information Systems--SCIE 79/163), EI, MOST 109-2221-E-002-158-MY2, MOST 108-2221-E-002-140

J. Y. Hung, K. W. Chen, P. Chandrashan, D. Myung, A. L. Kossler, C. S. Fuh, S. L. Liao, and C. R. Hsu, “[A Pilot Study on Novel Ptotic Eye Dataset: Automated Prediction of Horizontal Corneal Diameter on Digital Photos of Taiwanese Ptotic Patients by Convolutional Neural Networks (CNNs)](https://iovs.arvojournals.org/article.aspx?articleid=2779448),” *Investigative Ophthalmology & Visual Science*, Vol. 63, 728 – F0456, p. 1, 2022.

SCI 4.925 (2022: Ophthalmology - SCIE 10/61),

J. Y. Hung, K. W. Chen, C. Perera, H. K. Chiu, C. R. Hsu, D. Myung, A. C. Luo, C. S. Fuh, S. L. Liao, and A. L. Kossler, “[An Outperforming Artificial Intelligence Model to Identify Referable Blepharoptosis for General Practitioners](https://www.csie.ntu.edu.tw/~fuh/personal/AnOutperformingArtificialIntelligenceModeltoIdentifyRefererableBlepharoptosisforGeneralPractitioners.pdf),” *Journal of Personalized Medicine*, Vol. 12(2), No. 283, pp. 1-9, 2022.

SCI 4.945 (2022: Health Care Sciences & Services--SCIE 15/107),

National Eye Institute (P30 EY026877) and Research to Prevent Blindness (RPB)

to the Byers Eye Institute at Stanford University

T. Y. Wu, Y. C. Liao, C. S. Fuh, P. W. Weng, J. Y. Wang, C. Y. Chen, Y. M. Huang, C. P. Chen, Y. L. Chu, C. K. Chen, K. L. Yeh, C. H. Yu, H. K. Wu, W. P. Lin, T. H. Liou, M. S. Wu, and C. K. Liaw, “[An Improvement of Current Hypercube Pooling PCR Tests for SARS-CoV-2 Detection](https://www.csie.ntu.edu.tw/~fuh/personal/AnImprovementofCurrentHypercubePoolingPCRTestsforSARS-CoV-2Detection.pdf),” *Frontiers in Public Health,* DOI 10.3389/fpubh.2022.994712, pp. 1-6, 2022.

SCI 5.2 (2022: Public, Environmental & Occupational Health - SCIE 43/207), EI, MOST 109-2314-B-038-029

K. L. Yeh, C. K. Liaw, C. S. Fuh, C. S. Chen, C. H. Chiang, and K. S. Shih, “[Successful Plate Fixation with Long Intramedullary Fibula Bone Graft for Periprosthetic Femur Fracture: A Case Report](https://www.csie.ntu.edu.tw/~fuh/personal/SuccessfulPlateFixationwithLongIntramedullaryFibulaBoneGraftforPeriprostheticFemurFracture.ACaseReport.pdf),” *Medicina,* Vol. 58, No. 1148, pp. 1-8, 2022.

SCI 2.948 (2022: Medicine, General & Internal --SCIE 87/172),

K. L. Yeh, S. H. Wu, C. S. Fuh, Y. H. Huang, C. S. Chen, and S. S. Wu, “[Cauda Equina Syndrome Caused by the Application of Duraseal in a Microlaminectomy Surgery: A Case Report](https://www.csie.ntu.edu.tw/~fuh/personal/CaudaEquinaSyndromeCausedbytheApplicationofDuraSealinaMicrolaminectorySurgery.pdf),” *World Journal of Clinical Cases,* Vol. 10, No. 30, pp. 11178-11184, 2022.

SCI 1.534 (2022: Medicine, General & Internal --SCIE 136/172),

K. L. Yeh, T. Y. Wu, C. S. Fuh, C. S. Chen, S. M. Hou, C. H. Chiang, and C.K. Liaw, “[Degree of Pelvic Rotation in the Coronal Plane on Postoperative Radiographs Obtained after Total Hip Arthroplasty](https://www.csie.ntu.edu.tw/~fuh/personal/DegreeofPelvicRotationintheCoronalPlaneonPostoperativeRadiographs.pdf),” *Journal of Clinical Medicine,* Vol. 11, pp. 6353:1-9, https://doi.org/10.3390/jcm11216353, 2022.

SCI 4.964 (2022: Medicine, General & Internal, 55/172),

R.E.Zezario, S. W. Fu, F. Chen, C. S. Fuh, H. M. Wang, and Y. Tsao, “[Deep Learning-based Non-Intrusive Multi-Objective Speech Assessment Model with Cross-Domain Features](https://www.csie.ntu.edu.tw/~fuh/personal/DeepLearning-BasedNon-IntrusiveMulti-ObjectiveSpeechAssessmentModelwithCross-DomainFeatures.pdf),” *IEEE/ACM Transactions on Audio, Speech and Language Processing,* Vol. 31, pp. 54-70, DOI 10.1109/TASLP.2022.3205757, 2022.

SCI 4.364 (2022: Acoustics - SCIE 5/32),

J. Y. Hung, C. Perera, K. W. Chen, D. Myung, H. K. Chiu, C. S. Fuh, C. R. Hsu, S. L. Liao, and A. L. Kossler, “[A Deep Learning Approach to Identify Blepharoptosis by Convolutional Neural Networks](https://www.csie.ntu.edu.tw/~fuh/personal/ADeepLearningApproachtoIdentifyBlepharoptosisbyConvolutionalNeuralNetworks.pdf),” *International Journal of Medical Informatics,* <https://doi.org/10.1016/j.ijmedinf.2021.104402>, Vol. 148, No. 104402, pp. 1-7, 2021.

SCI 3.025 (2021: Health Care Sciences & Services--SCIE 26/102),

Stanford Taiwan MOST LEAP Program and National Eye Institute (P30 EY026877)

T. Y. Lin and C. S. Fuh, “[Quantum-Resistant Network for Classical Client Compatibility](https://www.csie.ntu.edu.tw/~fuh/personal/QuantumResistantNetworkforClassicalClientCompatibility.pdf),” *Information Technology and Control*, Vol. 50, No. 2, pp. 224-235, 2021.

SCI 0.905 (2021: Computer Science, Artificial Intelligence—SCIE 122/137), EI

H. P. Liu, Y. M. Chuang, C. H. Liu, P. C. Yang, and C. S. Fuh, “[Precise Measurement of Physical Activities and High-Impact Motion: Feasibility of Smart Activity Sensor System](https://www.csie.ntu.edu.tw/~fuh/personal/PreciseMeasurementofPhysicalActivitiesandHigh-ImpactMotion.pdf),” *IEEE Sensors Journal,* DOI 10.1109/JSEN.2020.3015392,Vol. 21, No. 1, pp. 568-580, 2021.

SCI 3.073 (2019: Engineering, Electrical & Electronic--SCIE 91/266), EI

T. C. Tsan, T. F. Shih, and C. S. Fuh, “[TsanKit: Artificial Intelligence for Solder Ball Head‑In‑Pillow Defect Inspection](https://www.csie.ntu.edu.tw/~fuh/personal/TsanKitArtificialIntelligenceforSolderBallHead-In-PillowDefectInspection.pdf),” *Machine Vision and Applications,* Vol. 32, No. 66, pp. 1-17, <https://doi.org/10.1007/s00138-021-01192-8>, 2021.

SCI 1.605 (2021: Computer Science, Artificial Intelligence--SCIE 90/137), EI, MOST 109-2221-E-002-158-MY2, MOST 108-2221-E-002-140

T. C. Tseng, T. F. Shih, and C. S. Fuh, “[Anti-Spoofing of Live Face Authentication on Smartphone](https://www.csie.ntu.edu.tw/~fuh/personal/Anti-SpoofingofLiveFaceAuthenticationonSmartphone.pdf),” *Journal of Information Science and Engineering,* Vol. 37, No. 3, pp. 605-616, 2021.

SCI Expanded 0.525 (2018: Computer Science, Information Systems 150/155), EI, MOST 106-2221-E-002-220

T. C. Tung and C. S. Fuh, “[ICEBIN: Image Contrast Enhancement Based on Induced Norm and Local Patch Approaches](https://www.csie.ntu.edu.tw/~fuh/personal/ICEBINImageContrastEnhancementBasedonInducedNormandLocalPatchApproaches.pdf),” *IEEE Access,* Vol. 9, pp. 23737-23750, DOI: 10.1109/ACCESS.2021.3056244, 2021.

SCI 3.745 (2021: Computer Science, Information Systems--SCIE 35/156), EI, MOST 109-2221-E-002-158-MY2, MOST 108-2221-E-002-140

J. C. Wu, S. Lu, C. S. Fuh, and T. L. Liu, “[One-Class Anomaly Detection via Novelty Normalization](https://www.csie.ntu.edu.tw/~fuh/personal/One-ClassAnomalyDetectionviaNoveltyNormalization.pdf),” *Computer Vision and Image Understanding*, Vol. 210, DOI# 103226, pp. 1-7, 2021.

SCI 3.876 (2021: Computer Science, Artificial Intelligence – SCIE 44/140), EI, MOST 110-2634-F-001-009

J. Y. Hung, Y. H. Wei, C. H. Huang, L. W. Chen, C. S. Fuh, and S. L. Liao, “[Survival Outcomes of Eye-Sparing Surgery for Adenoid Cystic Carcinoma of Lacrimal Gland](https://www.csie.ntu.edu.tw/~fuh/personal/SurvivalOutcomesofEye-SparingSurgeryforAdnoidCysticCarcinomaofLacrimalGland.pdf),” *Japanese Journal of Ophthalmology*, Vol. 64, Issue 4, pp. 344-351, <https://doi.org/10.1007/s10384-019-00671-w>, 2019.

SCI 1.775 (Ophthalmology, 35/59),

C. K. Liaw, Y. P. Chen, T. Y. Wu, C. S. Fuh, and R. F. Chang, “[New Computerized Method in Measuring the Sagittal Bowing of Femur from Plain Radiograph—A Validation Study](https://www.csie.ntu.edu.tw/~fuh/personal/NewComputerizedMethodinMeasuringtheSagittalBowingofFemurfromPlainRadiograph.pdf),” *Journal of Clinical Medicine,* Vol. 8, pp. 1598:1-10, doi:10.3390/jcm8101598, 2019.

SCI 5.688 (Medicine, General & Internal, 15/160),

T. Y. Lin and C. S. Fuh, “[Zero-Knowledge Realization of Software-Defined Gateway in Fog Computing](https://www.csie.ntu.edu.tw/~fuh/personal/Zero-KnowledgeRealizationofSoftware-DefinedGatewayinFogComputing.pdf),” *KSII Transactions on Internet and Information Systems*, Vol. 12, No. 12, pp. 5654-5668, 2018.

SCI 0.611 (Computer Science, Information Systems, SCIE, 137/148), EI, MOST 106-2221-E-002-220

H. P. Liu, Y. Tsao, and C. S. Fuh, “[Bone Conducted Speech Enhancement by Deep Denoising Autoencoder](https://www.csie.ntu.edu.tw/~fuh/personal/BoneConductedSpeechEnhancementUsingDeepDenoisingAutoencoder.pdf),” *Speech Communication*, Vol. 104, pp. 106-112, 2018.

SCI 1.768 (Acoustics, 12/31), EI, MOST 106-2221-E-002-220

J. M. Wang, S. W. Chen, and C. S. Fuh, “[Attributed Hypergraph Matching on A Riemannian Manifold](http://www.csie.ntu.edu.tw/~fuh/personal/AttributedHypergraphMatchingonaRiemannianManifold.pdf),” *Machine Vision and Applications*, Vol. 25, No. 4, pp. 823-844, 2014.

SCI Expanded 1.103 (Computer Science, Artificial Intelligence 65/115), EI

C. K. Liaw, T. Y. Wu, S. M. Hou, R. S. Yang, K. S. Shih, and C. S. Fuh, “[Computerized Ellipse Method for Measuring Acetabular Version after Total Hip Replacement – A Precision Study Using Synthetic and Real Radiographs](http://www.csie.ntu.edu.tw/~fuh/personal/ComputerizedEllipseMethodforMeasuring.pdf),” *Computer Aided Surgery*, Vol. 18, No. 5-6, pp. 195-200, 2013.

SCI 0.296 (Surgery 180/199)

C. K. Liaw, T. Y. Wu, S. M. Hou, R. S. Yang, and C. S. Fuh, “[How to Evaluate Three Dimensional Angle Error from Plain Radiographs](http://www.csie.ntu.edu.tw/~fuh/personal/HowtoEvaluate3DAngleErrorfromPlainRadiographs.pdf),” *Journal of Arthroplasty*, Vol. 28, pp. 1788-1790, 2013.

SCI 2.384 (Orthopedics 13/65)

C. C. Lin, C. H. Lee, C. S. Fuh, H. F. Huan, and H. C. Huang, “[Link Clustering Reveals Structural Characteristics and Biological Contexts in Signed Molecular Networks](http://www.csie.ntu.edu.tw/~fuh/personal/LinkClusteringRevealsStructualCharacteristics.pdf),” *PLoS ONE*, 8(6): e67089. doi:10.1371/journal.pone.0067089,Vol.8, Issue 6, pp. 1-9, 2013.

SCI 4.092 (Biology 12/85)

J. A. Lin and C. S. Fuh, “[2D Barcode Image Decoding](http://www.csie.ntu.edu.tw/~fuh/personal/2DBarcodeImageDecoding.pdf),” *Mathematical Problems in Engineering*, Vol. 2013, Article# 848276, pp. 1-10, 2013.

SCI 1.383 (Engineering, Multidisciplinary 23/90), EI

C. Y. Chen, S. T. Chen, C. S. Fuh, H. F. Juan, and H. C. Huang, “[Coregulation of Transcription Factors and Micrornas in Human Transcriptional Regulatory Network](http://www.csie.ntu.edu.tw/~fuh/personal/BMC%20Bioinformatics2011.pdf),” *BMC Bioinformatics*, Vol. 12, Suppl. 1, S41, pp. 1-10, 2011.

SCI 3.428 (2009: Mathematical & Computational Biology 4/29)

C. C. Hsieh, Y. P. Huang, Y. Y. Chen, and C. S. Fuh, “[Video Super-Resolution by Motion Compensated Iterative Back-Projection Approach](http://www.csie.ntu.edu.tw/~fuh/personal/VideoSuperResolutionbyMotionCompensated.pdf),” *Journal of Information Science and Engineering,* Vol. 27, No. 3, pp. 1107-1122, 2011.

SCI Expanded 0.175 (Computer Science, Information Systems 132/135), EI

Y. Y. Lin, T. L. Liu, and C. S. Fuh, “[Multiple Kernel Learning for Dimensionality Reduction](http://www.csie.ntu.edu.tw/~fuh/personal/MultipleKernelLearningforDimensionalityReduction.pdf),” *IEEE Transactions on Pattern Analysis and Machine Intelligence,* Vol. 33, No. 6, pp. 1147-1160,2011.

SCI 4.795 (Computer Science, Artificial Intelligence 4/115), EI

K. L. Kuo and C. S. Fuh, “[A Rule-Based Clinical Decision Model to Support](http://www.csie.ntu.edu.tw/~fuh/personal/ARuleBasedClinicalDecisionModeltoSupport.pdf)

[Interpretation of Multiple Data in Health Examinations](http://www.csie.ntu.edu.tw/~fuh/personal/ARuleBasedClinicalDecisionModeltoSupport.pdf),” *Journal of Medical Systems,* Vol. 35, Isuue 6, pp. 1359-1373, 2011.

SCI 0.450 (Medical Informatics 19/20)

L. C. Chiu and C. S. Fuh, “[Dynamic Color Restoration Method in Real Time Image System Equipped with Digital Image Sensors](http://www.csie.ntu.edu.tw/~fuh/personal/DynamicColorRestorationMethodinRealTime.pdf),” *Journal of the Chinese Institute of Engineers*, Vol. 33, No. 2, pp. 243-250, 2010.

SCI Expanded 0.219 (2009: Engineering, Multidisciplinary 62/79), EI

L. C. Chiu and C. S. Fuh, “[An Efficient Auto Focus Method for Digital Still Camera Based on Focus Value Curve Prediction Model](http://www.csie.ntu.edu.tw/~fuh/personal/AnEfficientAutoFocusMethodforDigitalStillCamera.pdf),” *Journal of Information Science and Engineering,* Vol. 26, No. 4, pp. 1261-1272, 2010.

SCI Expanded 0.202 (Computer Science, Information Systems 89/92), EI, NSC 95-2221-E-002-276-MY3

L. C. Chiu and C. S. Fuh, “[Calibration-Based Auto White Balance Method for Digital Still Camera](http://www.csie.ntu.edu.tw/~fuh/personal/Calibration-BasedAutoWhiteBalance.pdf),” *Journal of Information Science and Engineering,* Vol. 26, No. 2, pp. 713-723, 2010.

SCI Expanded 0.202 (Computer Science, Information Systems 89/92), EI, NSC 95-2221-E-002-276-MY3

K. L. Chung, W. J. Yang, P. Y. Chen, W. M. Yan, and C. S. Fuh, “[New Joint Demosaicing and Arbitrary-Ratio Resizing Algorithm for Color Filter Array Based on DCT Approach](http://www.csie.ntu.edu.tw/~fuh/personal/NewJointDemosaicingandArbitraryRatioResizing.pdf),” *IEEE Transactions on Consumer Electronics,* Vol. 56, No. 2, pp. 783-791, 2010.

SCI 0.985 (Engineering, Electrical & Electronic 121/229), EI, NSC 98-2221-E-011-102-MY3

K. L. Kuo and C. S. Fuh, “[A Health Examination System Integrated with Clinical Decision Support System](http://www.csie.ntu.edu.tw/~fuh/personal/AHealthExaminationSystemIntegratedwithClinical.pdf),” *Journal of Medical Systems,* Vol. 34, pp. 829-842, 2010.

SCI 0.450 (Medical Informatics 19/20)

K. L. Chung, W. J. Yang, P. Y. Chen, W. M. Yan, and C. S. Fuh, “[New Joint Demosaicing and Zooming Algorithm for Color Filter Array](http://www.csie.ntu.edu.tw/~fuh/personal/NewJointDemosaicingandZoomingAlgorithmforColorFilterArray.pdf),” *IEEE Transactions on Consumer Electronics,* Vol. 55, No. 3, pp. 1477-1486, 2009.

SCI 0.985 (Engineering, Electrical & Electronic 121/229), EI, NSC 97-2221-E-011-102-MY3

K. L. Chung, W. J. Yang, J. H. Yu, W. M. Yan, and C. S. Fuh, “[Novel Quality-Effective Zooming Algorithm for Color Filter Array](http://www.csie.ntu.edu.tw/~fuh/personal/NovelQualityEffectiveZoomingAlgorithm.pdf),” *Journal of Electronic Imaging*, Vol. 19, No. 1, pp. 013005-1-013005-15, 2009.

SCI 0.563 (Engineering, Electrical & Electronic 161/229)

C. K. Liaw, R. S. Yang, S. M. Hou, T. Y. Wu, and C. S. Fuh, “[Measurement of the Acetabular Cup Anteversion on Simulated Radiographs](http://www.csie.ntu.edu.tw/~fuh/personal/JOA.MeasurementoftheAcetabularCup.pdf),” *Journal of Arthroplasty*, Vol. 24, No. 3, pp. 468-474, 2009.

SCI 1.806 (Orthopedics 9/43)

T. Y. Wu, R. S. Yang, C. S. Fuh, S. M. Hou, and C. K. Liaw, “[THR Simulator - the Software for Generating Radiographs of THR Prosthesis](http://www.csie.ntu.edu.tw/~fuh/personal/THRSimulatortheSoftwareforGeneratingRadiographs.pdf),” *BMC Musculoskeletal Disorders,* Vol. 10, pp. 1-8, 2009.

SCI 1.323 (2007: Orthopedics 22/48)

C. K. Liaw, R. S. Yang, S. M. Hou, T. Y. Wu, and C. S. Fuh, “[A Simplified Guide Ruler from Numeric Table Method in Doing Rotational Osteotomy](http://www.csie.ntu.edu.tw/~fuh/personal/ASimplifiedGuideRulerfromNumericTableMethod.pdf),” *BMC Musculoskeletal Disorders,* Vol. 9, No. 87, pp. 1-6, 2008.

SCI 1.323 (2007: Orthopedics 22/48)

C. K. Liaw, R. S. Yang, S. M. Hou,  T. Y. Wu, and C. S. Fuh, “[A Simple Mathematical Standardized Measurement of Acetabulum Anteversion after Total Hip Arthroplasty](http://www.csie.ntu.edu.tw/~fuh/personal/ASimpleMathematicalStandardizedMeasurement.pdf),” *Computational and Mathematical Methods in Medicine*, Vol. 9, Issue 2, pp. 105–119, 2008.

SCI 0.814 (2011: Mathematical & Computational Biology 30/37)

Y. S. Chen, Y. P. Hung, T. F. Yen, and C. S. Fuh, “[Fast and Versatile Algorithm for Nearest Neighbor Search Based on a Lower Bound Tree](http://www.csie.ntu.edu.tw/~fuh/personal/FastandVersatileAlgorithmforNearestNeighbor.pdf),” *Pattern Recognition,* Vol. 40, pp. 360 – 375, 2007.

SCI 2.153 (Computer Science, Artificial Intelligence 17/79), EI

V. Chikane and C. S. Fuh, “[Automatic White Balance for Digital Still Cameras](http://www.csie.ntu.edu.tw/~fuh/personal/AutomaticWhiteBalanceforDigitalStillCameras.pdf),” *Journal of Information Science and Engineering,* Vol. 22, No. 3, pp. 497-509, 2006.

SCI Expanded 0.268 (Computer Science, Information Systems 77/83), EI, NSC 92-2213-E-002-072

C. K. Liaw, S. M. Hou, R. S. Yang, T. Y. Wu, and C. S. Fuh, “[A New Tool for Measuring Cup Orientation in Total Hip Arthroplasties from Plain Radiographs](http://www.csie.ntu.edu.tw/~fuh/personal/ANewToolforMeasuringCupOrientation.pdf),” *Clinical Orthopaedics and Related Research*, No. 451, pp. 134-139, 2006.

SCI 1.528 (Orthopedics 13/41)

H. T. Chen, T. L. Liu, and C. S. Fuh, “[Tone Reproduction: A Perspective from Luminance-Driven Perceptual Grouping](http://www.csie.ntu.edu.tw/~fuh/personal/ToneReproductionAPerspectivefromLuminance.pdf),” *International Journal of Computer Vision*,Vol. 65, No. 1/2, pp. 73-96, 2005.

SCI 3.657 (Computer Science, Artificial Intelligence 3/79), EI, NSC 93-2213-E-001-010, NSC 94-EC-17-A-02-S1-032

C. Y. Chen, Y. C. Kuo, and C. S. Fuh, “[Image Reconstruction with Improved Super-Resolution Algorithm](http://www.csie.ntu.edu.tw/~fuh/personal/ImageReconstructionwithImprovedSuperResolution.pdf),” *International Journal of Pattern Recognition and Artificial Intelligence*, Vol. 18, No. 8, pp. 1513-1527, 2004.

SCI Expanded 0.638 (Computer Science, Artificial Intelligence 55/79), EI, NSC 91-2711-3-319-001-SP-24, NSC 91-2212-E-002-087

C. Y. Fang, S. W. Chen, C. S. Fuh, and P. S. Yen, “[An Automatic Road Sign Recognition System Based on a Computational Model of Human Recognition Processing](http://www.csie.ntu.edu.tw/~fuh/personal/AnAutomaticRoadSignRecognitionSystem.pdf),” *Computer Vision and Image Understanding,* Vol. 96, No. 2, pp. 237-268, 2004.

SCI 1.468 (Computer Science, Artificial Intelligence 29/79), EI, NSC-90-2213-E-003-002

C. Y. Fang, S. W. Chen, and C. S. Fuh, “[Road Sign Detection and Tracking](http://www.csie.ntu.edu.tw/~fuh/personal/RoadSignDetectionandTracking.pdf),” *IEEE Transactions on Vehicular Technology,* Vol. 52, No. 5, pp. 1329-1341, 2003.

SCI 0.860 (Transportation Science & Technology 6/20), EI, NSC 89-2218-E-003-001

C. Y. Fang, S. W. Chen, and C. S. Fuh, “[Automatic Change Detection of Driving Environments in a Vision-Based Driver Assistance System](http://www.csie.ntu.edu.tw/~fuh/personal/AutomaticChangeDetectionofDrivingEnvironments.pdf),” *IEEE Transactions on Neural Networks,* Vol. 14, No. 3, pp. 646-657, 2003.

SCI 2.205 (Computer Science, Artificial Intelligence 14/79), EI, NSC 89-2218-E-003-001

Y. S. Chen, C. H. Su, J. H. Chen, C. S. Chen, Y. P. Hung, and C. S. Fuh, “[Video-Based Eye Tracking for Autostereoscopic Displays](http://www.csie.ntu.edu.tw/~fuh/personal/VieoBasedEyeTrackingforAutostereoscopic.pdf),” *Optical Engineering,* Vol. 40, No. 12, pp. 2726-2734, 2001.

SCI 0.754 (Optics 33/55), EI

M. C. Chang, C. S. Fuh, and H. Y. Chen, “[Fast Search Algorithms for Industrial Inspection](http://www.csie.ntu.edu.tw/~fuh/personal/FastSearchAlgorithmsforIndustrialInspection.pdf),” *International Journal of Pattern Recognition and Artificial Intelligence*, Vol. 15, No. 4, pp. 675-690, 2001.

SCI Expanded 0.638 (Computer Science, Artificial Intelligence 55/79), EI, NSC 88-2213-E-002-031

Y. S. Chen, Y. P. Hung, and C. S. Fuh, “[Fast Block Matching Algorithm Based on the Winner-Update Strategy](http://www.csie.ntu.edu.tw/~fuh/personal/FastBlockMatchingAlgorithmBasedonWinner.pdf),” *IEEE Transactions on Image Processing,* Vol. 10, No. 8, pp. 1212-1222,2001.

SCI 2.428 (Computer Science, Artificial Intelligence 12/79), EI

C. Y. Fang, C. S. Fuh, and S. W. Chen, “[Detection and Tracking of Road Signs](http://www.csie.ntu.edu.tw/~fuh/personal/DetectionandTrackingofRoadSigns.pdf),” *Pattern Recognition and Image Analysis,* Vol. 11, pp. 304-308, 2001.

NSC 89-2218-E-003-001

Y. S. Chen, L. G. Liou, Y. P. Hung, and C. S. Fuh, “[Three-Dimensional Ego-Motion Estimation from Motion Fields Observed with Multiple Cameras](http://www.csie.ntu.edu.tw/~fuh/personal/ThreeDimensionalEgoMotionEstimation.pdf),” *Pattern Recognition,* Vol. 34, pp. 1573-1583,2001.

SCI 2.153 (Computer Science, Artificial Intelligence 17/79), EI, NSC 86-2745-E-001-007

Y. S. Chen, S. W. Shih, Y. P. Hung, and C. S. Fuh, “[Simple and Efficient Method of Calibrating a Motorized Zoom Lens](http://www.csie.ntu.edu.tw/~fuh/personal/SimpleandEfficientMethodofCalibrating.pdf),” *Image and Vision Computing*, Vol. 19, No. 14, pp. 1099-1110, 2001.

SCI 1.383 (Computer Science, Artificial Intelligence 30/79), EI

C. S. Fuh, S. W. Cho, and K. Essig, “[Hierarchical Color Image Region Segmentation for Content-Based Image Retrieval System](http://www.csie.ntu.edu.tw/~fuh/personal/HierarchicalColorImageRegionSegmentation.pdf),” *IEEE Transactions on Image Processing,* Vol. 9, pp. 156-162,2000.

SCI 2.428 (Computer Science, Artificial Intelligence 12/79), EI, NSC 86-2212-E-002-025, NSC 88-2213-E-002-031

C. S. Chen, K. C. Hung, Y. P. Hung, L. L. Chen, and C. S. Fuh, “[Semi-Automatic Tool for Aligning a Parameterized CAD Model to Stereo Image Pairs](http://www.csie.ntu.edu.tw/~fuh/personal/SemiAutomaticToolforAligningaParameterized.pdf),” *IEICE Transactions on Information and Systems,* Vol. E82-D, pp. 1582-1588,1999.

SCI Expanded 0.242 (Computer Science, Information Systems 78/83), EI

C. S. Fuh and S. S. Lin, “[The Fourier Slice Theorem for Range Data Reconstruction](http://www.csie.ntu.edu.tw/~fuh/personal/TheFourierSliceTheoremforRangeDataReconstruction.pdf),” *Image and Vision Computing*, Vol. 16, pp. 689-701, 1998.

SCI 1.383 (Computer Science, Artificial Intelligence 30/79), EI, NSC 85-2212-E-002-077, NSC 86-2212-E-002-025

C. S. Fuh and H. B. Liu, “[Projection for Pattern Recognition](http://www.csie.ntu.edu.tw/~fuh/personal/ProjectionforPatternRecognition.pdf),” *Image and Vision Computing*, Vol. 16, pp. 677-687, 1998.

SCI 1.383 (Computer Science, Artificial Intelligence 30/79), EI, NSC 85-2212-E-002-077, NSC 86-2212-E-002-025

Y. P. Hung, C. S. Chen, K. C. Hung, Y. S. Chen, and C. S. Fuh, “[Multi-Pass Hierarchical Stereo Matching for Generation of Digital Terrain Models from Aerial Images](http://www.csie.ntu.edu.tw/~fuh/personal/MultipassHierarchicalStereoMatching.pdf),” *Machine Vision and Applications*, Vol. 10, pp. 280-291, 1998.

SCI Expanded 0.667 (Computer Science, Artificial Intelligence 52/79), EI

S. L. Kao and C. S. Fuh, “[Near Point Light Sources for Shape from Shading](http://www.csie.ntu.edu.tw/~fuh/personal/NearPointLightSourcesforShapefrmShading.pdf),” *International Journal of Pattern Recognition and Artificial Intelligence*, Vol. 12, pp. 951-968, 1998.

SCI Expanded 0.638 (Computer Science, Artificial Intelligence 55/79), EI, NSC 85-2212-E-002-077, NSC 86-2212-E-002-025

C. S. Fuh and P. Maragos, “[Least-Squares Algorithms for Motion and Shape Recovery under Perspective Projection](http://www.csie.ntu.edu.tw/~fuh/personal/LeastSquaresAlgorithmsforMotionandShapeRecoveryUnderPerspectiveProjection.pdf),” *Journal of Information Science and Engineering*, Vol. 12, pp. 1-23, 1996.

SCI Expanded 0.268 (Computer Science, Information Systems 77/83), EI, NSC 83-0408-E-002-010

Y. S. Chen and C. S. Fuh, “[Displacement Field Estimation and Image Segmentation Using Block Matching Enhanced by Neural Network](http://www.csie.ntu.edu.tw/~fuh/personal/DisplacementFieldEstimationandImageSegmentation.pdf),” *Spatial Vision*, Vol. 10, pp. 31-50, 1996.

SCI Expanded 1.178 (Biophysics 54/65), EI, NSC 83-0422-E-002-010, NSC 84-2212-E-002-046, NSC 85-2212- E-002-077

J. P. Hsu and C. S. Fuh, “[Image Segmentation to Inspect 3-D Object Sizes](http://www.csie.ntu.edu.tw/~fuh/personal/ImageSegmentationtoInspect3DObjectSizes.pdf),” *Optical Engineering*, Vol. 35, pp. 262-271, 1996.

SCI 0.754 (Optics 33/55), EI, NSC 83-0422-E-002-010, NSC 84-2212-E-002-046

C. S. Fuh and P. Maragos, “[Motion Displacement Estimation Using an Affine Model for Image Matching](http://www.csie.ntu.edu.tw/~fuh/personal/MotionDisplacementEstimationUsinganAffineModel.pdf),” *Optical Engineering*, Vol. 30, pp. 881-887, 1991.

SCI 0.754 (Optics 33/55), EI

C. S. Fuh, R. M. Owens and M.J. Irwin, “VLSI Layout Expectations,” *IEEE VLSI Technical Bulletin*, Vol. 2, pp. 57-64, 1987.

C. S. Fuh, K. Y. Pun, and R. M. Owens, “[Artist: A Silicon Assembler for Mesh Arrays](http://www.csie.ntu.edu.tw/~fuh/personal/ARTISTASiliconAssemberforMeshArrays.pdf),” Technical Report CS-86-31, Department of Computer Science, The Pennsylvania State University, 1986.

### Local Journal

C. S. Fuh (Editor), *Images & Recognition*, Vol. 28, No. 1, 2022.

C. S. Fuh (Editor), [*Images & Recognition*](http://www.csie.ntu.edu.tw/~fuh/personal/Images&Recognition2014.01_%e7%9b%ae%e9%8c%84_vol20_02.pdf), Vol. 20, No. 2, 2014.

T. H. Lin and C. S. Fuh, “[A Real-Time Method to Estimate Motion Blur Kernel on Discrete Wavelet Transform](http://www.csie.ntu.edu.tw/~fuh/personal/AReal-TimeMethodtoEstimateMotionBlurKernelonDiscreteWaveletTransform.pdf),” *Images & Recognition*, Vol. 20, No. 2, pp. 23-38, 2014.

C. F. Lin, S. W. Lo, P. S. Pa, and C. S. Fuh, “[Mobile Application Design of Augmented Reality – Digital Pet](http://www.csie.ntu.edu.tw/~fuh/personal/MobileApplicationDesignofAugmentedRealityDigitalPet_vol18_03.pdf),” *Images & Recognition*, Vol. 18, No. 3, pp. 21-30, 2013.

C. S. Fuh (Editor), [*Images & Recognition*](http://www.csie.ntu.edu.tw/~fuh/personal/ImagesRecognition2011index.pdf), Vol. 17, No. 1, 2011.

C. W. Hsu, C. S. Fuh, and Y. L. Tsai, “[Pressure-Sensitive Touch Panel with Camera](http://www.csie.ntu.edu.tw/~fuh/personal/PressureSensitiveTouchPanelwithCamera.pdf),” *Images & Recognition*, Vol. 17, No. 1, pp. 50-68, 2011.

Y. Y. Lin, T. L. Liu, and C. S. Fuh, “[Face Detection with Occlusions](http://www.csie.ntu.edu.tw/~fuh/personal/FaceDetectionwithOcclusions.pdf),” *Images & Recognition*, Vol. 13, No. 1, pp. 4-21, 2007.

C. S. Fuh (Editor), [*Images & Recognition*](http://www.csie.ntu.edu.tw/~fuh/personal/ImagesRecognition2006index.pdf), Vol. 12, No. 4, 2006.

C. C. Weng, H. M. Chen, and C. S. Fuh, “[A Novel Automatic White Balance Method for Digital Still Cameras](http://www.csie.ntu.edu.tw/~fuh/personal/ANovelAutomaticWhiteBalanceMethodforDigital.pdf),” *Images & Recognition*, Vol. 12, No. 4, pp. 4-9, 2006.

K. Y. Chen and C. S. Fuh, “[High Dynamic Range Images Using Exposure Metering](http://www.csie.ntu.edu.tw/~fuh/personal/HighdynamicrangeImagesUsingExposureMetering.pdf),” *Images & Recognition*, Vol. 12, No. 4, pp. 31-39, 2006.

Y. M. Lin and C. S. Fuh, “[Image Stabilization System on a Camera Module with Image Composition](http://www.csie.ntu.edu.tw/~fuh/personal/ImageStabilizationSystemonaCameraModulewith.pdf),” *Images & Recognition*, Vol. 12, No. 4, pp. 40-45, 2006.

Y. L. Huang and C. S. Fuh, “[Noise Reduction Using Enhanced Bilateral Filter](http://www.csie.ntu.edu.tw/~fuh/personal/NoiseReductionUsingEnhancedBilateralFilter.pdf),” *Images & Recognition*, Vol. 12, No. 4, pp. 46-53, 2006.

C. S. Fuh (Editor), *Images & Recognition*, Vol. 9, No. 4, 2003.

C. C. Yu and C. S. Fuh, “Auto Exposure,” *Images & Recognition*, Vol. 9, No. 4, pp. 4-10, 2003.

W. S. Liao and C. S. Fuh, “[Autofocus](http://www.csie.ntu.edu.tw/~fuh/personal/Images&Recognition.Vol.9,No.4.Autofocus.pdf),” *Images & Recognition*, Vol. 9, No. 4, pp. 11-17, 2003.

V. Chikane and C. S. Fuh, “[Auto White Balance for Digital Still Camera](http://www.csie.ntu.edu.tw/~fuh/personal/AWB.ImagesandRecogntion2003.pdf),” *Images & Recognition*, Vol. 9, No. 4, pp. 18-24, 2003.

C. Y. Yang and C. S. Fuh, “[An Introduction to Digital Color Management](http://www.csie.ntu.edu.tw/~fuh/personal/AnIntroductiontoDigitalColorManagement.pdf),” *Images & Recognition*, Vol. 9, No. 4, pp. 25-32, 2003.

W. H. Hsieh, C. S. Fuh, and C. Y. Hsu, “Color Calibration for Digital Camera,” *Images & Recognition*, Vol. 9, No. 4, pp. 33-43, 2003.

Y. M. Wu, C. S. Fuh, and J. P. Hsu, “[Color Interpolation for Single CCD Color Camera](http://www.csie.ntu.edu.tw/~fuh/personal/ImagesRecognition2003.ColorInterpolation.pdf),” *Images & Recognition*, Vol. 9, No. 4, pp. 44-50, 2003.

C. S. Fuh (Editor), *Images & Recognition*, Vol. 7, No. 4, 2001.

C. Y. Fang, S. W. Chen, and C. S. Fuh, “[Road Sign Detection and Tracking from Complex Background in Sequential Video Images](http://www.csie.ntu.edu.tw/~fuh/personal/RoadSignDetectionandTrackinginSequential.pdf),” *Images & Recognition*, Vol. 6, No. 4, pp. 33-55, 2000.

M. H. Wu, C. S. Fuh, and H. Y. Chen, “[Defect Inspection and Analysis of Color Filter Panel](http://www.csie.ntu.edu.tw/~fuh/personal/DefectInspectionandAnalysisofColorFilterPanel.pdf),” *Images & Recognition*, Vol. 6, No. 2, pp. 74-90, 2000.

NSC 88-2213-E-002-031

Y. C. Lin and C. S. Fuh, “[Correcting Distortion for Digital Cameras](http://www.csie.ntu.edu.tw/~fuh/personal/CorrectingDistortionforDigitalCameras.pdf),” *Proceedings of the NSC--Part A: Physical Science and Engineering*, Vol. 24, pp. 115-119, 1999.

EI, NSC 85-2212-E-002-077, NSC 86-2212-E-002-025

C. Y. Fang, C. P. Tung, S. W. Chen, and C. S. Fuh, “[Character Recognition Using an Assembly of SSO Neural Networks](http://www.csie.ntu.edu.tw/~fuh/personal/CharacterRecognitionUsinganAssemblyofSSONeuralNetworks.pdf),” *Images & Recognition*, Vol. 4, pp. 4-19, 1998.

Y. P. Hung, Y. S. Chen, Y. S. Yang, I. B. Hsieh, and C. S. Fuh, “[Development of a Free-Hand Pointer Using an Active Stereo Vision System](http://www.csie.ntu.edu.tw/~fuh/personal/DevelopmentofaFree-HandPointerUsinganActiveStereoVisionSystem.pdf),” *Journal of Computers*, Vol. 10, pp. 15-26, 1998.

NSC 85-2213-E-001-016

S. J. Wang and C. S. Fuh, “RCV for Adaptive Dominant Point Detection,” *Proceedings of the NSC--Part A: Physical Science and Engineering*, Vol. 22, pp. 61-77, 1998.

EI, NSC 85-2212-E-002-077, NSC 86-2212-E-002-025

M. S. Wu, C. S. Fuh, and H. Y. Chen, “Discussion on Ball Grid Array Inspection Technology,” *Journal of the Mechatronic Industry*, Vol. 187, pp. 150-156, 1998.

Y. C. Yang, C. S. Fuh, and L. H. Chen, “Character Segmentation in Machine Printed Chinese Characters,” *Journal of Computers*, Vol. 10, pp. 1-14, 1998.

NSC 85-2212-E-002-077, NSC 86-2212-E-002-025

H. Z. Gao and C. S. Fuh, “Real-Time Inspection of Paper Roll on MaxVideo 200,” *Images & Recognition*, Vol. 4, pp. 96-105, 1997.

NSC 85-2212-E-002-077, NSC 86-2212-E-002-025

J. S. Hwang and C. S. Fuh, “Dynamic Programming to Match Regions in Stereo,” *Bulletin of The College of Engineering, National Taiwan University*, Vol. 70, pp. 51-59, 1997.

NSC 85-2212-E-002-077, NSC 86-2212-E-002-025

B. Y. Huang, Y. P. Hung, and C. S. Fuh, “Reduced Rigid-Body Motion for Corner-Driven Optical Flow Estimation,” *Bulletin of The College of Engineering, National Taiwan University*, Vol. 67, pp. 87-108, 1996.

NSC 83-0408-E-001-010, NSC 84-0408-E-001-004

S. L. Kao and C. S. Fuh, “Photometry for Shape from Shading,” *Proceedings of the NSC--Part A: Physical Science and Engineering*, Vol. 20, pp. 204-208, 1996.

EI, NSC 83-0422-E-002-010, NSC 84-2212-E-002-046

### International Conference

R. E. Zezario, B. R. B. Bai, C. S. Fuh, H. M. Wang, and Y. Tsao, “[Multi-Task Pseudo-Label Learning for Non-Intrusive Speech Quality Assessment Model](https://www.csie.ntu.edu.tw/~fuh/personal/Multi-TaskPseudo-LabelLearningforNon-IntrusiveSpeechQualityAssessmentModel.pdf),” *Proceedings of International Conference on Acoustics, Speech and Signal Processing*, Seoul, Korea, Paper# 5284, AASP-P6.3, pp. 831-835, 2024.

R. E. Zezario, F.Chen, C. S. Fuh, H. M. Wang, and Y. Tsao, “[Non-Intrusive Speech Intelligibility Prediction for Hearing Aids Using Whisper and Metadata](https://www.csie.ntu.edu.tw/~fuh/personal/Non-IntrusiveSpeechIntelligibilityPredictionforHearingAidsUsingWhisperandMetadata.pdf),” *Proceedings of Interspeech*, Kos Island, Greece, Paper# 716, A6-O5.2, pp. 3844-3848, 2024.

J. Y. Hung, A. C. Luo, Y. S. Deng, C. Y. Chung, C. S. Fuh, C. Perera, D. Myung, A. L. Kossler, and S. L. Liao, “[Automated Detection of Dysthyroid Optic Neuropathy in Graves’ Ophthalmopathy with Computed Tomography (CT) Scans by Convolutional Neural Networks](file:///G:\user\fuh\nstc(國科會).most%20(科技部)\nstc23p\https:\www.csie.ntu.edu.tw\~fuh\personal\AutomatedDetectionofDysthyroidOpticNeuropathy.pptx),” *Proceedings of ARVO*, Poster 2394 - C0457, p. 1, 2023.

P. C. Wang, C. Shen, W. C. Wang, M. Oda, C. S. Fuh, K. Mori, and H. R. Roth, “[ConDistFL: Conditional Distillation for Federated Learning from Partially Annotated Data](https://www.csie.ntu.edu.tw/~fuh/personal/ConDistFL.ConditionalDistillationforFederatedLearning.pdf),” *Proceedings of Workshop on Distributed, Collaborative and Federated Learning*, International Conference on Medical Image Computing and Computer-Assisted Intervention, Vancouver, Canada, Paper# 4, pp. 1-11, 2023.

J. C. Wu, D. J. Chen, and C. S. Fuh, “[Contrastive Feature Decoupling for Weakly-Supervised Disease Detection](https://www.csie.ntu.edu.tw/~fuh/personal/ContrastiveFeatureDecouplingforWeakly-SupervisedDiseaseDetection.pdf),” *Proceedings of* *International Conference on Medical Image Computing and Computer-Assisted Intervention*, Vancouver, Canada, Paper# 1098, pp. 252-261, 2023.

NSTC 112-2221-E-002-189-MY2, MOST 111-2221-E-002-174

J. C. Wu, H.Y. Hsieh, D. J. Chen, C. S. Fuh, and T. L. Liu, “[Self-Supervised Sparse Representation for Video Anomaly Detection](https://www.csie.ntu.edu.tw/~fuh/personal/Self-SupervisedSparseRepresentationforVideoAnomalyDetection.pdf),” *Proceedings of European Conference on Computer Vision*, Tel Aviv, Israel, Paper# 1561, pp. 729-745, 2022.

MOST 110-2634-F-007-027,110-2221-E-001-017, 111-2221-E-001-015

R. E. Zezario, F. Chen, C. S. Fuh, H. M. Wang, and Y. Tsao, “[MBI-Net: A Non-Intrusive Multi-Branched Speech Intelligibility Prediction Model for Hearing Aids](https://www.csie.ntu.edu.tw/~fuh/personal/MBI-Net.ANon-IntrusiveMulti-BranchedSpeechIntelligibilityPredictionModelforHearingAids.pdf),” *Proceedings of Interspeech*, Incheon, Korea, Paper# 10838, pp. 1-5, 2022.

R. E. Zezario, S. W. Fu, F. Chen, C. S. Fuh, H. M. Wang, and Y. Tsao, “[MTI-Net: A Multi-Target Speech Intelligibility Prediction Model](https://www.csie.ntu.edu.tw/~fuh/personal/MTI-Net.AMulti-TargetSpeechIntelligibilityPredictionModel.pdf),” *Proceedings of Interspeech*, Incheon, Korea, Paper# 10828, pp. 1-5, 2022.

J. L. Liu, Y. T. A. Tsai, C. S. Fuh, and F. Huang, “[MamboNet: Adversarial Semantic Segmentation for Autonomous Driving](https://www.csie.ntu.edu.tw/~fuh/personal/MamboNetAdversarialSemanticSegmentationforAutonomousDriving.pdf),” *Proceedings of International Symposium on Geometry and Vision*, Auckland, New Zealand (virtual), Paper# 10103, pp. 1-9, 2021.

C. Shen, P. C. Wang, H. R. Roth, D. Yang, D. G. Xu, M. Oda, W. C. Wang, C. S. Fuh, P. T. Chen, K. L. Liu, W. C. Liao, and K. Mori, “[Multi-task Federated Learning for Heterogeneous Pancreas Segmentation](https://www.csie.ntu.edu.tw/~fuh/personal/Multi-TaskFederatedLearningforHeterogeneousPancreasSegmentation.pdf),” *Proceedings of MICCAI Workshop on Distributed and Collaborative Learning,* Strasbourg, France (virtual), LNCS 12969, pp. 101–110, <https://doi.org/10.1007/978-3-030-90874-4_10>, 2021.

J. C. Wu, D. J. Chen, C. S. Fuh, and T. L. Liu, “[Learning Unsupervised Metaformer for Anomaly Detection](https://www.csie.ntu.edu.tw/~fuh/personal/LearningUnsupervisedMetaformerforAnomalyDetection.pdf),” *Proceedings of International Conference on Computer Vision*, virtual, Paper# 3960, pp. 4369-4378, 2021.

MOST 110-2634-F-001-009 and 110-2221-E-001-017

R. E. Zezario, C. S. Fuh, H. M. Wang, and Y. Tsao, “[Speech Enhancement with Zero-Shot Model Selection](https://www.csie.ntu.edu.tw/~fuh/personal/SpeechEnhancementwithZero-ShotModelSelection.pdf),” *Proceedings of European Signal Processing Conference*, virtual, Paper# 6756, pp. 491-495, 2021.

Y. H. Tsai, M. C. Tseng, C. S. Fuh, and C. Y. Wang, “[Detection of Driver Drowsiness Using Multi-Task Learning](https://www.csie.ntu.edu.tw/~fuh/personal/DetectionofDriverDrowsinessUsingMulti-TaskLearning.pdf),” *Proceedings of International Congress on Natural Sciences and Engineering*, Nagoya, Japan, Paper# 10103, pp. 1-9, 2020.

MOST 106-2221-E-002-220 and MOST 108-2221-E-002-140

R. E. Zezario, S. W. Fu, C. S. Fuh, Y. Tsao, and H. M. Wang, “[STOI-Net: A Deep Learning Based Non-Intrusive Speech Intelligibility Assessment Model](https://www.csie.ntu.edu.tw/~fuh/personal/STOI-NetADeepLearningBasedNon-IntrusiveSpeecIntelligibilityAssessmentModel.pdf),” *Proceedings of APSIPA Annual Summit and Conference*, Auckland, New Zealand,(Virtual), Paper# 1381, pp. 482-486, 2020.

J. C. Wu, B. J. Lin, B. Y. Zeng, L. C. Fu, C. S. Fuh, and T. L. Liu, “[Cast Search via Two-Stream Label Propagation](https://www.csie.ntu.edu.tw/~fuh/personal/CastSearchviaTwo-StreamLabelPropagation.pdf),” *Proceedings of ICCV Workshop on WIDER Cast Search with Portrait*, Seoul, Korea, pp. 1-5, 2019.

H. R. Zhang, C. K. Huang, and C. S. Fuh, “Automatic Livestock Volume Measure with Artificial Intelligence System,” *Proceedings of International Conference on Unmanned System Application-Geoinformatics, Agriculture, Manufacturing & Environment,* Chiang Mai, Thailand, Paper UA190010-C2, pp. 1-4, 2019.

C. H. Chang, T. H. Chu, and C. S. Fuh, “[Detecting Rice Crop Fields Distribution with Spatio-Temporal Remote Sensing Information During the First Rice Season in 2018](https://www.csie.ntu.edu.tw/~fuh/personal/DetectingRiceCropFieldsDistributionwithSpatio-TemporalRemoteSensingInformationDuringtheFirstRiceSeasonin2018.pdf),” *Proceedings of Global Land Programme Asia Conference*, Taipei, Taiwan, Oral Session 13, Paper# 18110, pp. 1-35, 2018.

B. J. Lin, T. C. Tsan, Y. H. Lee, T. C. Tung, and C. S. Fuh, “[Use 3D Convolutional Neural Network to Inspect Solder Ball Defects](https://www.csie.ntu.edu.tw/~fuh/personal/Use3DConvolutionalNeuralNetworktoInspectSolderBallDefects.pdf),” *Proceedings of International Conference on Neural Information Processing*, Siem Reap, Cambodia, *Lecture Note on Computer Science*, Vol. 11301, pp. 263-274, 2018.

MOST 104-2221-E-002 -133-MY2, MOST 106-2221-E-002-220

T. C. Tsan, Y. H. Lee, T. C. Tung, B. J. Lin, and C. S. Fuh, “[Solder Ball 3D Reconstruction with X-Ray Images Using Filtered Back Projection,](https://www.csie.ntu.edu.tw/~fuh/personal/SolderBalls3DReconstructionwithX-RayImagesUsingFilteredBackProjection.pdf)” *Proceedings of TenCon*, Jeju, Korea, Paper# 1570461557, pp. 2505-2510, 2018.

MOST 104-2221-E-002 -133-MY2, MOST 106-2221-E-002-220

T. C. Tung and C. S. Fuh, “[Image Watercolorization Based on Color Intensity Alteration](https://www.csie.ntu.edu.tw/~fuh/personal/ImageWatercolorizationBasedonColorIntensityAlteration.pdf),” *Proceedings of International Workshop on Advanced Image Technology*, Chiang Mai, Thailand, Paper# 202, pp. 1-4, 2018.

MOST 104-2221-E-002 -133-MY2, MOST 106-2221-E-002-220

H. P. Kao, T. C. Tung, H. Y. Chen, C. S. Wong, and C. S. Fuh, “[Pin Defect Inspection with X-Ray Images](https://www.csie.ntu.edu.tw/~fuh/personal/PinDefectInspectionwithXRayImages.pdf),” *Proceedings of International Symposium on Neural Networks*, Sapporo, Japan, *Lecture Notes in Computer Science*, Vol. 10262, Part II, pp. 465-473, 2017.

MOST 103-2221-E-002 -188, MOST 104-2221-E-002 -133-MY2

T. Y. Lin and C.S. Fuh, “[Considerations of Emerging Cloud Computing in Financial Industry and One-Time Password with Valet Key Solution](https://www.csie.ntu.edu.tw/~fuh/personal/ConsiderationsofEmergingCloudComputinginFinancialIndustry.pdf),” *Proceedings of International Symposium on Cloud and Service Computing*, Nadi, Fiji, Session 6, Paper 3, pp. 1-8, 2016.

C. K. Liaw, T. Y. Wu, C. S. Lin, C. S. Fuh, R. S. Yang, S. M. Hou, and K. S. Shih, “[Computerized Ellipse Method for Measuring Acetabular Version after THR – A Precision Study Using Synthetic and Real Radiographs](http://www.csie.ntu.edu.tw/~fuh/personal/APAS2015.ComputerizedEllipseMethod.pdf),” *Proceedings of Asia Pacific Arthroplasty Society Annual Scientific Meeting*, Delhi, India, p. 36, 2015.

C. K. Liaw, T. Y. Wu, C. S. Lin, C. S. Fuh, R. S. Yang, S. M. Hou, and K. S. Shih, “[How to Evaluate Three-Dimensional Angle Error from Plain Radiographs](http://www.csie.ntu.edu.tw/~fuh/personal/APAS2015.HowtoEvaluate.pdf),” *Proceedings of Asia Pacific Arthroplasty Society Annual Scientific Meeting*, Delhi, India, p. 36, 2015.

C. K. Liaw, T. Y. Wu, C. S. Lin, C. S. Fuh, R. S. Yang, S. M. Hou, and K. S. Shih, “[A New Technique to Increase Reliability in Measuring the Axis of Bone](http://www.csie.ntu.edu.tw/~fuh/personal/APAS2015.A%20New%20technique%20to%20increase%20reliability%20in%20measuring.2.pdf),” *Proceedings of Asia Pacific Arthroplasty Society Annual Scientific Meeting*, Delhi, India, p. 37, 2015.

C. K. Liaw, T. Y. Wu, S. M. Hou, R. S. Yang, C. S. Fuh, and K. S. Shih, “[How to Evaluate Three-Dimensional Angle Difference from Plain Radiographs](http://www.csie.ntu.edu.tw/~fuh/personal/HowtoEvaluateThreeDimensionalAngleDifferencefromPlainRadiograph.SICOT2014.ppt),” *Proceedings of SICOT/SIROT Annual International Conference*, Rio de Janeiro, Brazil, Paper# 37642, 2014.

C. F. Lin, P. S. Pa, C. S. Fuh: “[A MAR Game Design via a Remote Control Module](http://www.csie.ntu.edu.tw/~fuh/personal/AMARGameDesignviaaRemoteControlModule.pdf),” *Proceedings of International Conference on Augmented Reality, Virtual Reality*, Lecce, Italy, *Lecture Note on Computer Science*, Vol.8853, pp. 3-18, 2014.

NSC 98-2221-E-002 -150 -MY3, NSC 101-2221-E-002 -194

J. M. Wang, H. P. Chou, S. W. Chen, and C. S. Fuh, “[Image Compensation for Improving Extraction of Driver’s Facial Features](http://www.csie.ntu.edu.tw/~fuh/personal/ImageCompensationforImprovingFacialFeatureExtraction.pdf),” *Proceedings of International Conference on Computer Vision Theory and Applications,* Lisbon, Portugal, pp. 329-338, 2014.

NSC 102-2221-E-002 -177

C. F. Lin, P. S. Pa, and C. S. Fuh, “[Mobile Application of Interactive Remote Toys with Augmented Reality](http://www.csie.ntu.edu.tw/~fuh/personal/MobileApplicationofInteractiveRemoteToyswithAugmentedReality.pdf),” *Proceedings of Asia-Pacific Signal and Information Processing Association Annual Summit and Conference,* Kaohsiung, Taiwan, Paper#284, pp. 1-6, 2013.

EI, NSC 98-2221-E-002 -150 -MY3, NSC 101-2221-E-002 -194

J. M. Wang, C. F. Hsu, S. W. Chen, and C. S. Fuh, “[Generation of Environmental Representation of a Large Indoor Parking Lot](http://www.csie.ntu.edu.tw/~fuh/personal/GenerationofEnvironmenatalRepresentationofaLarge.pdf),” *Proceedings of International Conference on Neural Information Processing*, Doha, Qatar, also *Lecture Note on Computer Science*, LNCS 7664,pp. 307-315, 2012.

EI, NSC 101-2221-E-002 -194

C. Y. Chen, S. T. Chen, C. S. Fuh, H. F. Juan, H. C. Huang, “[Coregulation of Transcription Factors and MicroRNAs in Human Transcriptional Regulatory Network](http://www.csie.ntu.edu.tw/~fuh/personal/APBC2011.paper.docx),” *Proceedings of Asia Pacific Bioinformatics Conference,* Incheon, Korea, pp. 1-23, 2011.

J. M. Wang, S. W. Chen, and C. S. Fuh, “[Extracting Driver’s Facial Features During Driving](http://www.csie.ntu.edu.tw/~fuh/personal/ExtractingDriversFacialFeaturesDuringDriving.pdf),” *Proceedings of International IEEE Conference on Intelligent Transportation Systems*, Washington, DC, FB2.6,paper# 144, pp. 1-6, 2011.

C. W. Chen, D. Y. Huang, and C. S. Fuh, “[Automatic Skin Color Beautification](http://www.csie.ntu.edu.tw/~fuh/personal/ArtsIT.AutomaticSkinColorBeautification.00300157.pdf),” *Proceedings of ArtsIT,* Ilan, Taiwan, pp. 157-164, 2010.

C. K. Liaw, R. S. Yang, S. M. Hou, T. Y. Wu, and C. S. Fuh, “[A Mathematical Standardized Measurement of Acetabulum Anteversion after Total Hip Arthroplasty](http://www.csie.ntu.edu.tw/~fuh/personal/AMIOA.AMathematicalStandardizedMeasurementofAcetabulumAnteversionafterTotalHipArthoplasty.pdf),” *Proceedings of Annual Meeting of Israeli Orthopedic Association,* Jerusalem, Israel, p. 16, 2010.

C. K. Liaw, T. Y. Wu, R. S. Yang, S. M. Hou, and C. S. Fuh, “[A Simplified Guide Ruler for Rotational Osteotomy](http://www.csie.ntu.edu.tw/~fuh/personal/AMIOA.ASimplifiedGuideRulerforRotationalCorrectiveOsteotomy.pdf),” *Proceedings of Annual Meeting of Israeli Orthopedic Association,* Jerusalem, Israel, p. 12, 2010.

C. K. Liaw, T. Y. Wu, R. S. Yang, C. S. Fuh, and S. M. Hou, “[THR Simulator - the Software for Generating Radiographs of THR Prosthesis](http://www.csie.ntu.edu.tw/~fuh/personal/AMIOA.THRSimulatorTheSoftwareforGenerating.pdf),” *Proceedings of Annual Meeting of Israeli Orthopedic Association,* Jerusalem, Israel, p. 28, 2010.

Y. Y. Lin, T. L. Liu, and C. S. Fuh, “[Clustering Complex Data with Group-Dependent Feature Selection](http://www.csie.ntu.edu.tw/~fuh/personal/ClusteringComplexDatawithGroup-Dependent.pdf),” *Proceedings of European Conference on Computer Vision,* Crete, Greece, also *Lecture Note on Computer Science*, LNCS 6316, pp. 84-97, 2010.

H. P. Chou, J. M. Wang, C. S. Fuh, S. C. Lin, and S. W. Chen, “[Automated Lecture Recording System](http://www.csie.ntu.edu.tw/~fuh/personal/AutomatedLectureRecordingSystem.pdf),” *Proceedings of International Conference on System Science and Engineering,* Taipei, Taiwan, pp. 167-172, 2010.

Y. Y. Lin and C. S. Fuh, “[Multimodal Kernel Learning for Image Retrieval](http://www.csie.ntu.edu.tw/~fuh/personal/MultimodalKernalLearning.pdf),” *Proceedings of International Conference on System Science and Engineering,* Taipei, Taiwan, pp. 155-160, 2010.

C. K. Liaw, T. Y. Wu, R. S. Yang, C. S. Fuh, and S. M. Hou, “[THR Simulator---The Software for Generating Radiographs of THR Prosthesis](http://www.csie.ntu.edu.tw/~fuh/personal/THRSimulator.SICOT.ppt),” *Proceedings of SICOT/SIROT Annual International Conference*, Pattaya, Thailand, Paper# 22557, 2009.

J. M. Wang, S. W. Chen, and C. S. Fuh, “[Video Stabilization for a Hand-Held Camera Based on 3D Motion Model](http://www.csie.ntu.edu.tw/~fuh/personal/ICIP.VideoStabilization.0003477.pdf),” *Proceedings of International Conference on Image Processing,* Cairo, Egypt, pp. 3477-3480, 2009.

C. W. Chen and C. S. Fuh, “[Clear Focused Image from Macro and Infinite Images](http://www.csie.ntu.edu.tw/~fuh/personal/ClearFocusedImagefromMacroandInfiniteImages.pdf),”*Proceedings of International Conference on Consumer Electronics,* Las Vegas, Paper# P4-13, pp. 1-2, 2008.

NSC 95-2221-E-002-276-MY3

L. C. Chiu and C. S. Fuh, “[A Robust Denoising Filter with Adaptive Edge Preservation](http://www.csie.ntu.edu.tw/~fuh/personal/ARobustDenoisingFilterwithAdaptiveEdgePreservation1.pdf),” *Proceedings of Pacific-Rim Conference on Multimedia,* Tainan, Taiwan, (also Lecture Notes in Computer Science (LNCS), Vol. 5353, Springer-Verlag) pp. 923-926, 2008.

SCI 0.402 (Computer Science, Theory & Methods 62/71), NSC 95-2221-E-002-276-MY3

C.C.Hsieh, Y. P. Huang, W. C. Ho, and C. S. Fuh,“[Video Super-Resolution by Integrating SAD and NCC Matching Criterion for Multiple Moving Objects](http://www.csie.ntu.edu.tw/~fuh/personal/VideoSuperResolutionbyIntegratingSADandNCC.pdf),” *Proceedings of IASTED International Conference on Computer Graphics and Imaging,* Innsbruck, Austria, Paper# 600-032, 2008.

K. L. Kuo, H. C. Lee, and C. S. Fuh, “[The Bioinformatics System for the Research of Interleukin 1 Gene Polymorphisms and Related Factors in Gastric Cancers](http://www.csie.ntu.edu.tw/~fuh/personal/2008AMIASpring_Poster_FullSize.ppt),”*Proceedings of AMIA Spring Congress,* Phoenix, AZ, Poster #5, 2008.

C. K. Liaw, C. S. Fuh, R. S. Yang, S. M. Hou, T. Y. Wu, and C. H. Hou, “[Liaw’s Version - A New Standardised Version of Acetabular Prosthesis](http://www.csie.ntu.edu.tw/~fuh/personal/StandardizedAcetabulumAnteversionafterTotalHipArthoplasty.pdf),” *Proceedings of SICOT/SIROT Annual International Conference*, Hong Kong, Paper# 18407, 2008.

Y. Y. Lin, T. L. Liu, and C. S. Fuh, “[Dimensionality Reduction for Data in Multiple Feature Representations](http://www.csie.ntu.edu.tw/~fuh/personal/DimensionalityReductionforDatainMultipleFeature.pdf),”*Proceedings of Conference on Neural Information Processing Systems,* Vancouver, Paper#153, T44, pp. 1-8, 2008.

J. M. Wang, S. W. Chen, and C. S. Fuh, “[Foreground Object Detection Using Two Successive Image Frames](http://www.csie.ntu.edu.tw/~fuh/personal/AVSS2008.ForegroundObjectDetection.3341a301.pdf),” *Proceedings of International Conference on Advanced Video and Signal-Based Surveillance,* Santa Fe, New Mexico, pp. 301-306, 2008.

W. Hsu and C. S. Fuh, “[Real-Time Demosaicking for Embedded Systems](http://www.csie.ntu.edu.tw/~fuh/personal/RealTimeDemosaickingforEmbeddedSystems.pdf),”*Proceedings of International Conference on Consumer Electronics,* Las Vegas, pp. 371-372, 2007.

NSC 95-2221-E-002-276-MY3

K. L. Kuo and C. S. Fuh, “[The Scheduling Support System Used in Clinical Work Allocation](http://www.csie.ntu.edu.tw/~fuh/personal/TheSchedulingSupportSystemUsedinClinicalWork.pdf),” *Proceedings of American Medical Informatics Association Spring Congress,* Orlando, FL, Session 2, Board 4, 2007.

C. K. Liaw, R. S. Yang, S. M. Hou, C. S. Fuh, and T. Y. Wu, “[Measurement of the Acetabular Cup Anteversion on the Simulated Radiographs](http://www.csie.ntu.edu.tw/~fuh/personal/MeasurementoftheAcetabularCupAnteversion.pdf),” *Proceedings of SICOT/SIROT Annual International Conference*, Marrakesh, Morocco, p. 245, 2007.

Y. Y. Lin, T. L. Liu, and C. S. Fuh, “[Local Ensemble Kernel Learning for Object Category Recognition](http://www.csie.ntu.edu.tw/~fuh/personal/LocalEnsembleKernelLearning.pdf),” *Proceedings of IEEE Conference on Computer Vision and Pattern Recognition*, Minneapolis, Minnesota, pp. 1-8, 2007.

P. M. Wang and C. S. Fuh, “[Automatic White Balance with Color Temperature Estimation](http://www.csie.ntu.edu.tw/~fuh/personal/AutomaticWhiteBalancewithColorTemperature.pdf),”*Proceedings of International Conference on Consumer Electronics,* Las Vegas, pp. 381-382, 2007.

NSC 95-2221-E-002-276-MY3

H. T. Chen, T. L. Liu, and C. S. Fuh, “[Segmenting Highly Articulated Video Objects with Weak-Prior Random Forests](http://www.csie.ntu.edu.tw/~fuh/personal/SegmentingHighlyArticulatedVideoObjectswith.pdf),” *Proceedings of European Conference on Computer Vision,* Graz, Austria, Part IV, (also Lecture Notes in Computer Science (LNCS), Vol. 3954, Springer-Verlag,) pp. 373-385, 2006.

SCI 0.402 (Computer Science, Theory & Methods 62/71), NSC 94-2213-E-001-005, NSC 94-2213-E-001-020, NSC 94-EC-17-A-02-S1-032

W. Hsu and C. S. Fuh, “[A New Sampling Method of Auto Focus for Voice Coil Motor in Camera Modules](http://www.csie.ntu.edu.tw/~fuh/personal/ANewSamplingMethodofAutoFocusforVoiceCoil.pdf),” *Proceedings of Pacific Rim Symposium on Advances in Image and Video Technology,* Hsinchu, Taiwan, (also Lecture Notes in Computer Science (LNCS), Vol. 4319, Springer-Verlag,) pp. 1254-1263, 2006.

SCI 0.402 (Computer Science, Theory & Methods 62/71) NSC 95-2221-E-002-276-MY3

C. S. Fuh and K. L. Kuo, “[The Decision Support System Used in HEALS (Health Examination Automatic Logic System](http://www.csie.ntu.edu.tw/~fuh/personal/TheDecisionSupportSystemUsedinHEALS.pdf),” *Proceedings of American Medical Informatics Association Spring Congress,* Phoenix, AZ, p. 19, 2006.

K. L. Kuo and C. S. Fuh, “[HEALS: Health Examination Automatic Logic System](http://www.csie.ntu.edu.tw/~fuh/personal/HEALSHealthExaminationAutomaticLogicSystem.pdf),” *Proceedings of American Medical Informatics Association Spring Congress,* Phoenix, AZ, p. 15, 2006.

C. K. Liaw, R. S. Yang, S. M. Hou, C. S. Fuh, and T. Y. Wu, “[Simulated Radiograph of Total Hip Arthroplasty for Verifying Measuring Instrument](http://www.csie.ntu.edu.tw/~fuh/personal/SimulatedRadiographofTotalHipArthroplastyforVerifying.ppt),” *Proceedings of SICOT/SIROT Annual International Conference*, Buenos Aires, p. 129, 2006.

C. K. Liaw, R. S. Yang, S. M. Hou, C. S. Fuh, and T. Y. Wu, “[A New Tool for Measuring Cup Orientation in Total Hip Arthroplasty](http://www.csie.ntu.edu.tw/~fuh/personal/Arthroplasty.ppt),” *Proceedings of SICOT/SIROT Annual International Conference*, Buenos Aires, p. 132, 2006.

C. K. Liaw, R. S. Yang, S. M. Hou, C. S. Fuh, and T. Y. Wu, “[Accuracy of Measurement of Acetabulum Anteversion with Radiographs of Total Hip Replacements](http://www.csie.ntu.edu.tw/~fuh/personal/AccuracyofMeasurementofAcetabulumAnteversionwith.ppt),” *Proceedings of SICOT/SIROT Annual International Conference*, Buenos Aires, p. 132, 2006.

C. K. Liaw, R. S. Yang, S. M. Hou, C. S. Fuh, and T. Y. Wu, “[Automatic Digital PE Wear Measurement](http://www.csie.ntu.edu.tw/~fuh/personal/AutomaticDigitalPEWearMeasurement.ppt),” *Proceedings of SICOT/SIROT Annual International Conference*, Buenos Aires, p. 133, 2006.

H. T. Chen, T. L. Liu, and C. S. Fuh, “[Learning Effective Image Metrics from Few Pairwise Examples](http://www.csie.ntu.edu.tw/~fuh/personal/LearningEffectiveImageMetricsfromFewPairwise.pdf),”*Proceedings of International Conference on Computer Vision,* Beijing, Vol. 2, pp. 1371-1378, 2005.

C. K. Liaw, T. Y. Wu, S. M. Hou, R. S. Yang, C. S. Fuh, S. H. Liao, C. C. Wu, H. C. Tai, and D. H. Lu, “[Automatic Digital PE Wear Measurement](http://www.csie.ntu.edu.tw/~fuh/personal/AutomaticPEWearMeter.pdf),” *Final Program of Annual Meeting of American Academy of Orthopaedic Surgeons,* Washington, DC, SE020, p. 136, 2005.

H. T. Chen, T. L. Liu, and C. S. Fuh, “[Probabilistic Tracking with Adaptive Feature Selection](http://www.csie.ntu.edu.tw/~fuh/personal/ProbabilisticTrackingwithAdaptiveFeatureSelection.pdf),”*Proceedings of International Conference on Pattern Recognition,* Cambridge, UK, Vol. 2, pp. 736-739, 2004.

H.T. Chen, T.L. Liu, and C.S. Fuh, “[On the Distribution-Based Tracking  
Systems](http://www.csie.ntu.edu.tw/~fuh/personal/OntheDistributionBasedTrackingSystems.pdf),”*Proceedings of IEEE International Conference on Networking, Sensing and Control*, Taipei, Taiwan, pp. 210-215, 2004.

Y. Y. Lin, T. L. Liu, and C. S. Fuh, “[Fast Object Detection with Occlusions](http://www.csie.ntu.edu.tw/~fuh/personal/FastObjectDetectionwithOcclusions.pdf),” *Proceedings of European Conference on Computer Vision,* Prague, Part 1, (also Lecture Notes in Computer Science (LNCS), Vol. 3021, Springer-Verlag,) pp. 402-413, 2004.

SCI 0.402 (Computer Science, Theory & Methods 62/71)

Y. M. Wu, C. S. Fuh, and J. P. Hsu, “[Color Interpolation for Single CCD Color Camera](http://www.csie.ntu.edu.tw/~fuh/personal/ColorInterpolationforSingleCCDColorCamera.pdf),” *Proceedings of IEEE Southwest Symposium on Image Analysis and Interpretation,* Lake Tahoe, NV, pp. 90-94, 2004.

C. Y. Fang, C. P. Chen, C. S. Fuh, and S. W. Chen, “[A System to Detect Complex Motion of Nearby Vehicles on Freeways](http://www.csie.ntu.edu.tw/~fuh/personal/ASystemtoDetectComplexMotionofNearbyVehicles.pdf),” *Proceedings of International Conference on Intelligent Transportation Systems,* Shanghai, pp. 1122-1127, 2003.

NSC 90-2213-E-003-002

C. Y. Fang, C. S. Fuh, S. W. Chen, and P. S. Yen, “[A Road Sign Recognition System Based on Dynamic Visual Model](http://www.csie.ntu.edu.tw/~fuh/personal/ASystemtoDetectComplexMotionofNearbyVehicles.pdf),” *Proceedings of IEEE Conference on Computer Vision and Pattern Recognition*, Madison, Wisconsin, pp. I-750-755, 2003.

NSC 91-2213-E-003-003

Y. S. Chen, Y. P. Hung, and C. S. Fuh, “[Fast Semi-Local Alignment for DNA Sequence Database Search](http://www.csie.ntu.edu.tw/~fuh/personal/FastSemiLocalAlignmentforDNASequenceDatabase.pdf),” *Proceedings of International Conference on Pattern Recognition,*Quebec City, pp. 1019-1022, 2002.

C. Y. Fang, C. S. Fuh, and S. W. Chen, “[Driving Environmental Change Detection Subsystem in a Vision-Based Driver Assistance System](http://www.csie.ntu.edu.tw/~fuh/personal/DrivingEnvironmentChangeDetectionSubsystem.pdf),” *Proceedings of International Joint Conference on Neural Networks,* Hawaii, pp. 624-629, 2002.

NSC 89-2218-E-003-001

C. S. Chen, W. T. Hsieh, H. J. Ho, J. H. Chen, and C. S. Fuh, “Panorama-Guided Visual Tracking and Its Application,” *Proceedings of International Workshop on Computer Graphics and Virtual Reality,* (best paper award) Tamshui, Taipei, pp. 101-108, 2001.

Y. S. Chen, Y. P. Hung, and C. S. Fuh, “[Fast Algorithm for Nearest Neighbor Search Based on a Lower Bound Tree](http://www.csie.ntu.edu.tw/~fuh/personal/FastAlgorithmforNearestNeighborSearchBasedon.pdf),” *Proceedings of International Conference on Computer Vision,* Vancouver, Canada, pp. 446-453, 2001.

Y. S. Chen, Y. P. Hung, and C. S. Fuh, “[Winner-Update Algorithm for Nearest Neighbor Search](http://www.csie.ntu.edu.tw/~fuh/personal/WinnerUpdateAlgorithmforNearestNeighborSearch.pdf),” *Proceedings of International Conference on Pattern Recognition,* Barcelona, Spain, Vol. 2, pp. 708-711, 2000.

Y. S. Chen, S. W. Shih, Y. P. Hung, and C. S. Fuh, “[Camera Calibration with a Motorized Zoom Lens](http://www.csie.ntu.edu.tw/~fuh/personal/CameraCalibrationwithaMotorizedZoomLens.pdf),” *Proceedings of International Conference on Pattern Recognition,* Barcelona, Spain, Vol. 4, pp. 495-498, 2000.

NSC 88-2213-E-001-010

Y. S. Chen, Y. P. Hung, and C. S. Fuh, “[A Fast Block Matching Algorithm Based on the Winner-Update Strategy](http://www.csie.ntu.edu.tw/~fuh/personal/AFastBlaockMatchingAlgorithmBasedontheWinner.pdf),” *Proceedings of Asian Conference on Computer Vision,* Taipei, Taiwan, pp. 977-982, 2000.

C. Y. Fang, S. W. Chen, and C. S. Fuh, “[Detection and Tracking of Road Signs](http://www.csie.ntu.edu.tw/~fuh/personal/DetectionandTrackingofRoadSigns.pdf),” *Proceedings of International Conference on Pattern Recognition and Image Analysis,* Samara, Russia, pp. 645-650, 2000.

NSC 89-2218-E-003-001

H. C. Huang, Y. C. Lin, Y. P. Hung, and C. S. Fuh, “[New Video Object Segmentation Technique Based on Flow-Thread Features for MPEG-4 and Multimedia Systems](http://www.csie.ntu.edu.tw/~fuh/personal/NewVideoObjectSegmentationTechniqueBasedon.pdf),” *Proceedings of SPIE Symposium on Image and Video Communications and Processing,* San Jose, CA, pp. 204-212, 2000.

Y. C. Lin, Y. P. Hung, and C. S. Fuh, “[Order-Invariant Toboggan Algorithm for Image Segmentation](http://www.csie.ntu.edu.tw/~fuh/personal/OrderInvariantTobogganAlgorithmforImageSegmentation.pdf),” *Proceedings of International Computer Symposium,* Chiayi, Taiwan, pp. 149-156, 2000.

S. W. Cho, C. S. Fuh, and K. Essig, “[Content-Based Image Retrieval System by Hierarchical Color Image Region Segmentation](http://www.csie.ntu.edu.tw/~fuh/personal/ContentBasedImageRetrievalSystembyHierarchical.pdf),” *Proceedings of International Conference on Digital Image Computing, Techniques, and Applications,* Perth, Australia, pp. 104-109, 1999.

NSC 86-2212-E-002-025, NSC 88-2213-E-002-031

H. C. Huang, Y. P. Hung, Y. C. Lan, P. H. Lin, and C. S. Fuh, “[Digital Zoom Based on Hypothesized Boundary](http://www.csie.ntu.edu.tw/~fuh/personal/AdaptiveDigitalZoomTechniquesBasedonHypothesizedBoundary.pdf),” *Proceedings of International Symposium on Multimedia Information Processing,* Taipei, Taiwan, pp. 90-97, 1999.

Y. P. Hung, C. S. Chen, I. B. Hsieh, and C. S. Fuh, “[Reconstruction of Complete 3D Object Model from Multiview Range Images](http://www.csie.ntu.edu.tw/~fuh/personal/ReconstructionofComplete3DObjectModelfrom.pdf),” *Proceedings of SPIE's International Symposium on Electronic Imaging*, San Jose, CA, pp. 138-145, 1999.

M. C. Chang, H. Y. Chen, and C. S. Fuh, “[Fast Search Algorithms for IC Printed Mark Quality Inspection](http://www.csie.ntu.edu.tw/~fuh/personal/FastSearchAlgorithmsforICPrintedMarkquality.pdf),” *Proceedings of IAPR Workshop on Machine Vision Applications*, Chiba, Japan, pp. 183-188, 1998.

NSC 85-2212-E-002-077, NSC 86-2212-E-002-025

C. S. Chen, Y. P. Hung, G. C. Hung, L. L. Chen, and C. S. Fuh, “Semi-Automatic Construction of Parameterized CAD Models and Its Application to Augmented Reality,” *Proceedings of International Symposium on Image, Speech, Signal Processing, and Robotics,* Hong Kong, 1998.

S. C. Chou and C. S. Fuh, “[Classification of Intestine Polyps](http://www.csie.ntu.edu.tw/~fuh/personal/ClassificationofIntestinePolyps.pdf),” *Proceedings of SPIE's International Symposium on Medical Imaging*, San Diego, CA, pp. 1003-1016, 1998.

NSC 85-2212-E-002-077, NSC 86-2212-E-002-025

Y. P. Hung, Y. S. Yang, Y. S. Chen, I. B. Shieh, and C. S. Fuh, “[Free-Hand Pointer by Use of an Active Stereo Vision System](http://www.csie.ntu.edu.tw/~fuh/personal/FreeHandPointerbyUseofanActiveStereo.pdf),” *Proceedings of International Conference on Pattern Recognition*, Brisbane, Australia, pp. 1244-1246, 1998.

NSC 85-2213-E-001-016, NSC 86-2745-E-001-007

Y. C. Lin and C. S. Fuh, “[Distortion Correction for Digital Cameras](http://www.csie.ntu.edu.tw/~fuh/personal/ISCGIPV.DistortionCorrectionforDigitalCameras.pdf),” *Proceedings of International Symposium on Computer Graphics, Image Processing, and Vision*, Rio de Janeiro, Brazil, pp. 396-401, 1998.

NSC 85-2212-E-002-077, NSC 86-2212-E-002-025

H. Z. Gao and C. S. Fuh, “Real-Time System for Paper Roll Inspection,” *Proceedings of Conference on Digital Imaging Computing: Techniques and Applications*, Auckland, New Zealand, pp. 273-278, 1997.

NSC 85-2212-E-002-077, NSC 86-2212-E-002-025

A. T. Tsao, Y. P. Hung, C. S. Fuh, and Y. S. Chen, “[Ego-Motion Estimation Using Optical Flow Fields Observed from Multiple Cameras](http://www.csie.ntu.edu.tw/~fuh/personal/EgoMotionEstimationUsingOpticalFlowFields.pdf),” *Proceedings of IEEE Conference on Computer Vision and Pattern Recognition*, Puerto Rico, pp. 457-462, 1997.

NSC 85-2212-E-002-077, NSC 86-2212-E-002-025

Y. S. Chen, C. S. Fuh, and Y. P. Hung, “[Neural Network for Displacement Field Estimation and Image Segmentation Using Block Matching](http://www.csie.ntu.edu.tw/~fuh/personal/NeuralNetworkforDisplacementFieldEstimation.pdf),” *Proceedings of Image Segmentation Workshop*, Sydney, Australia, pp. 13-20, 1996.

NSC 85-2212-E-002-077, NSC 86-2212-E-002-025

S. S. Lin and C. S. Fuh, “[Range Data Reconstruction Using Fourier Slice Theorem](http://www.csie.ntu.edu.tw/~fuh/personal/RangeDataReconstructionUsingFourierSlice.pdf),” *Proceedings of International Conference on Pattern Recognition*, Vienna, Austria, pp. 874-878, 1996.

NSC 84-2212-E-002-046, NSC 85-2212-E-002-077

H. B. Liu and C. S. Fuh, “Pattern Recognition Using Projection,” *Proceedings of International Conference on Control, Automation, Robotics, and Vision*, Singapore, pp. 63-67, 1996.

NSC 84-2212-E-002-046, NSC 85-2212-E-002-077

J. P. Hsu and C. S. Fuh, “[Image Segmentation for Stone Size Inspection](http://www.csie.ntu.edu.tw/~fuh/personal/ImageSegmentationforStoneSizeInspection.pdf),” *Proceedings of SPIE's Symposium on Visual Communications and Image Processing*, Taipei, Taiwan, pp. 1614-1625, 1995.

NSC 83-0422-E-002-010, NSC 84-2212-E-002-046

J. S. Hwang and C. S. Fuh, “Region Matching Using Dynamic Programming in Stereo, *Proceedings of Conference on Digital Imaging Computing: Techniques and Applications*, Brisbane, Australia, pp. 282-287, 1995.

NSC 83-0422-E-002-010, NSC 84-2212-E-002-046, NSC 85-2212-E-002-077

S. L. Kao and C. S. Fuh, “[Shape from Shading Using Near Point Light Sources](http://www.csie.ntu.edu.tw/~fuh/personal/ShapefromShadingUsingNearPointLightSources.pdf),” *Proceedings of International Computer Science Conference*, Hong Kong, also *Lecture Notes in Computer Science*, 1024, Springer-Verlag, pp. 487-488, 1995.

SCI 0.402 (Computer Science, Theory & Methods 62/71), EI, NSC 83-0422-E-002-010, NSC 84-2212-E-002-046, NSC 85-2212-E-002-077

S. J. Wang and C. S. Fuh, “Adaptive Dominant Point Detection via the Rated Composite Vectors,” *Proceedings of International Conference on Automation, Robotics and Computer Vision*, Singapore, pp. 1173-1177, 1994.

NSC 84-2212-E-002-046

C. S. Fuh, P. Maragos, and L. Vincent, “[Visual Motion Correspondence by Region-Based Approaches](http://www.csie.ntu.edu.tw/~fuh/personal/FuhMaragosVincent_VisualMotionCorrespondenceByRegionBasedApproaches_ACCV1993.pdf),” *Proceedings of Asian Conference on Computer Vision*, Osaka, Japan, pp. 784-789, 1993.

C. S. Fuh and P. Maragos, “[Affine Models for Motion and Shape Recovery](http://www.csie.ntu.edu.tw/~fuh/personal/AffineModelforMotionandShapeRecovery.pdf),” *Proceedings of SPIE's Symposium on Visual Communications and Image Processing*, Boston, pp. 120-134, 1992.

C. S. Fuh and P. Maragos, “[Affine Models for Image Matching and Motion Detection](http://www.csie.ntu.edu.tw/~fuh/personal/AffineModelsforImageMatchingandMotionDetection.pdf),” *Proceedings of International Conference on Acoustic, Speech and Signal Processing*, Toronto, Canada, pp. 2409-2412, 1991.

C. S. Fuh and P. Maragos, “Application of Mathematical Morphology to Motion Image Analysis,” *Proceedings of Electronic Imaging Conference East*, Boston, pp. 261-264, 1990.

C. S. Fuh and P. Maragos, “[Region-Based Optical Flow Estimation](http://www.csie.ntu.edu.tw/~fuh/personal/RegionBasedOpticalFlowEstimation.pdf),” *Proceedings of IEEE Conference on Computer Vision and Pattern Recognition*, San Diego, pp. 130-135, 1989.

### Local Conference

C. Y. Chang, Y. Y. Li, S. M. Chen, S. Y. Huang, T. Chen, C. H. Chou, and C. S. Fuh, “[ChangSafe: Embedded System Performance Acceleration and Network Pruning](https://www.csie.ntu.edu.tw/~fuh/personal/ChangSafeEmbeddedSystemPerformanceAccelerationandNetworkPruning.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, HuaLien, Taiwan, Paper# 1020, pp. 103-111, 2024.

K. H. Chao, F. S. Cheng, and C. S. Fuh, “[Multimodal MRI Deformable Registration via Unsupervised Learning and Mutual Information](https://www.csie.ntu.edu.tw/~fuh/personal/MultimodalMRIDeformableRegistrationviaUnsupervisedLearningandMutualInformation.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, HuaLien, Taiwan, Paper# 1022, pp. 120-128, 2024.

Y. J. Chen, T. C. Tung, J. H. Kang, Y. C. Chu, C. S. Fuh, P. H. Chen, Y. T. Liao, C. M. Yang, L. J. Huang and S. R. Huang, “[Cross-Camera Multi-Target Vehicle Tracking](https://www.csie.ntu.edu.tw/~fuh/personal/Cross-CameraMulti-TargetVehicleTracking.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, HuaLien, Taiwan, Paper# 1064, pp. 372-376, 2024.

Y. Y. Li and C. S. Fuh, “[Reconstruction of 3D Solid Ball by X-Ray Image](https://www.csie.ntu.edu.tw/~fuh/personal/Reconstructionof3DSolidBallbyX-RayImage.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, HuaLien, Taiwan, Paper# 1004, pp. 17-24, 2024.

T. Y. Liao and C. S. Fuh, “[PlantTratis2024 – FGVC11](https://www.csie.ntu.edu.tw/~fuh/personal/PlantTraits2024-FGVC11.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, HuaLien, Taiwan, Paper# 1002, pp. 9-16, 2024.

F. Lin, Y. T. A. Tsai, C. C. Huang, and C. S. Fuh, “[Segmentation of Tooth Crack on Dental CT-Scan Images](https://www.csie.ntu.edu.tw/~fuh/personal/SegmentationofToothCrackonDentalCT-ScanImages.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, HuaLien, Taiwan, Paper# 1057, pp. 325-332, 2024.

Y. L. Liu and C. S. Fuh, “[Fine-Tune the 1-Bit Vision Transformer on CIFAR-10](https://www.csie.ntu.edu.tw/~fuh/personal/Fine-Tunethe1-BitVisionTransformeronCIFAR-10.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, HuaLien, Taiwan, Paper# 1001, pp. 1-8, 2024.

D. Osako, J. J. Ding, C. C. Lin, and C. S. Fuh, “[Tumor Detection Based on Adaptive Segmentation with Gaussian Smoothers and Laplacian Filters for Ultrasonic Images](https://www.csie.ntu.edu.tw/~fuh/personal/TumorDetectionBasedonAdaptiveSegmentationwithGaussianSmoothersandLaplacianFiltersforUltrasonicImages.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, HuaLien, Taiwan, Paper# SS1019, pp. 692-699, 2024.

S. W. Yang and C. S. Fuh, “[Understanding Plant Traits with Vision Foundation Models](https://www.csie.ntu.edu.tw/~fuh/personal/UnderstandingPlantTraitswithVisionFoundationModels.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, HuaLien, Taiwan, Paper# 1009, pp. 40-47, 2024.

T. C. Chang, C. S. Fuh, Z. H. He, and W. C. You, “[ChangSR: Super Resolution for Solder Balls on Printed Circuit Board X-Ray Image](https://www.csie.ntu.edu.tw/~fuh/personal/ChangSR.SuperResolutionforSolderBallsonPrintedCircuitBoardX-RayImage.pdf),” *Proceedings of Conference on Information Technology and Applications in Outlying Islands*, I-Lan, Taiwan, Paper# 129, pp. 1-6, 2023.

H. N. Chen, A. Tsai, K.H. Wu, T. C. Chang, W. C. You, Z. H. He, and C. S. Fuh, “[ChenSafe: Fault Injection and Corner Cases with CARLA Simulation for Autonomous Driving Vehicle](https://www.csie.ntu.edu.tw/~fuh/personal/ChenSafe.FaultInjectionandCornerCaseswithCARLASimulationforAutonomousDrivingVehicle%5d.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kinmen, Taiwan, Paper# 70, pp. 430-437, 2023.

Y. H. Chen and C. S. Fuh, “[Using Dlib and CNN to Recognize the Facial Expression of People](https://www.csie.ntu.edu.tw/~fuh/personal/UsingDlibandCNNtoRecognizetheFacialExpressionofPeople.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kinmen, Taiwan, Paper# 3, pp. 9-16, 2023.

Y. Fu and C. S. Fuh, “[Efficient Hybrid Attention Network for Image Super-Resolution](https://www.csie.ntu.edu.tw/~fuh/personal/EfficientHybridAttentionNetworkforImageSuper-Resolution.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kinmen, Taiwan, Paper# 8, pp. 46-54, 2023.

Y. T. Huang and C. S. Fuh, “[Deep Learning Boosts Visual Odometry](https://www.csie.ntu.edu.tw/~fuh/personal/DeepLearningBoostsVisualOdometry.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kinmen, Taiwan, Paper# 4, pp. 17-24, 2023.

J. H. Kang, L. C. Chiu, W. C. Yu, C. H. Ho, T. C. Chang, and C. S. Fuh, “KangSafe: Moving Vehicle and Collision Detection for Autonomous Driving Vehicle during Reverse Parking,” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kinmen, Taiwan, Paper# 34, pp. 205-212, 2023.

C. H. Liaw and C. S. Fuh, “[Contextual Energy Equalization and Gamma Correction-Based Contrast Enhancement with Clipping Constraint](https://www.csie.ntu.edu.tw/~fuh/personal/ContextualEnergyEqualizationandGammaCorrection-BasedContrastEnhancementwithClippingConstraint.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kinmen, Taiwan, Paper# 5, pp. 25-32, 2023.

F. Liawi, and C. S. Fuh, “[Scene Text Editing](https://www.csie.ntu.edu.tw/~fuh/personal/SceneTextEditing.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kinmen, Taiwan, Paper# 98, pp. 569-577, 2023.

C. W. Lin, A. Yurusov, and C. S. Fuh, “LinAlign: X-Ray Image Alignment before and after Total Hip Arthroplasty,” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kinmen, Taiwan, Paper# 100, pp. 585-592, 2023.

S. Y. Lin, C. S. Fuh, J. H. Kang, T. C. Chang, Z. H. Ho, and W. C. You, “LinDMS: Driver Monitoring System with Embedded System,” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kinmen, Taiwan, Paper# 16, pp. 95-102, 2023.

Z. R. Lin and C. S. Fuh, “[Detecting Harmful Image with Text Memes: A Multimodal Analysis](https://www.csie.ntu.edu.tw/~fuh/personal/DetectingHarmfulImagewithTextMemes.AMultimodalAnalysis.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kinmen, Taiwan, Paper# 6, pp. 33-40, 2023.

Y. F. Ling and C. S. Fuh, “[Resurrecting an Ancient Library: Detection and Decoding of Ink from 3D X-Ray Scans of Carbonized Scrolls](https://www.csie.ntu.edu.tw/~fuh/personal/ResurrectinganAncientLibrary.DetectionandDecodingofInkfrom3DX-RayScansofCarbonizedScrolls.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kinmen, Taiwan, Paper# 2, pp. 1-8, 2023.

H. C. Lo and C. S. Fuh, “[Enhancing Long-Tailed 3D Semantic Segmentation with Category-wise Linguistic-Visual Representation](https://www.csie.ntu.edu.tw/~fuh/personal/EnhancingLong-Tailed3DSemanticSegmentationwithCategory-wiseLinguistic-VisualRepresentation.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, CVGIP Second Best Paper, Kinmen, Taiwan, Paper# 39, pp. 238-245, 2023.

A. Tsai, K.H. Wu, and C. S. Fuh, “[Survey of Acceleration Techniques for Text-to-Image Generation Using Diffusion Models](https://www.csie.ntu.edu.tw/~fuh/personal/SurveyofAccelerationTechniquesforText-to-ImageGenerationUsingDiffusionModels.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kinmen, Taiwan, Paper# 83, pp. 512-515, 2023.

W. Y. Tsao, A. Tsai, K.H. Wu, T. C. Chang, W. C. You, Z. H. He, and C. S. Fuh, “[TsaoSafe: Fault Injection and Corner Cases with CARLA Simulation for Autonomous Driving Vehicle](https://www.csie.ntu.edu.tw/~fuh/personal/TsaoSafe.FaultInjectionandCornerCaseswithCARLASimulationforAutonomousDrivingVehicle.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kinmen, Taiwan, Paper# 70, pp. 430-437, 2023.

T. W. Wang, H. P. Huang, and C. S. Fuh, “[Improved Real-Time Dense ORB SLAM with GPU Implementation](https://www.csie.ntu.edu.tw/~fuh/personal/ImprovedReal-TimeDenseORBSLAMwithGPUImplementation.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kinmen, Taiwan, Paper# 27, pp. 173-180, 2023.

M. C. Hsu, C. K. Li, Y. H. Shao, K. R. You, and C. S. Fuh, “[HsuKit: 3D Reconstructed Solder Ball Shape Improvement and Defect Inspection with X-Ray Images](https://www.csie.ntu.edu.tw/~fuh/personal/HsuKit.3DReconstructedSolderBallShapeImprovementandDefectInspection.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, SunLinkSea, Taiwan, Paper# 17, pp. 1-8, 2022.

B. C. Kung, S. Y. Lin, and C. S. Fuh, “Driver Monitoring System with Embedded Artificial Intelligence,” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, SunLinkSea, Taiwan, Paper# 10, pp. 1-8, 2022.

C. W. Lin and C. S. Fuh, “Detection of Operators’ Inspection Quality in Car Factory,” *Proceedings of Conference on Information Technology and Applications in Outlying Islands*, Peng-Hu, Taiwan, Paper# P3-17, pp. 1362-1367, 2022.

J. C. Lin, Y. T. Tsai, P. W. Wu, Y. C. Chang, T. C. Chang, and C. S. Fuh, “LinSafe: Fault Injection for Object Detection model of Autonomous Driving Vehicle,” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, SunLinkSea, Taiwan, Paper# 80, pp. 1-8, 2022.

Y. C. Liu, Y. L. Lin, C. Y. Chou, and C. S. Fuh, “[Identification of Nail Lesions Based on Mask R-CNN Deep Learning Model](https://www.csie.ntu.edu.tw/~fuh/personal/IdentificationofNailLesionsBasedonMaskR-CNNDeepLearningModel.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, SunLinkSea, Taiwan, Paper# 8, pp. 1-8, 2022.

D. Y. Lu and C. S. Fuh, “[Improved Image Network with Uniform Distribution for Crop Classification](https://www.csie.ntu.edu.tw/~fuh/personal/ImprovedImageNetworkwithUniformDistributionforCropClassification.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, SunLinkSea, Taiwan, Paper# 1, pp. 1-9, 2022.

T. L. Tsou and C. S. Fuh, “[3D Object Detection with Temporal Information](https://www.csie.ntu.edu.tw/~fuh/personal/3DObjectDetectionwithTemporalInformation.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, SunLinkSea, Taiwan, Paper# 9, pp. 1-8, 2022.

C. H. Tu and C. S. Fuh, “[LSVM: A Linguistically Semantic Voxel Map](https://www.csie.ntu.edu.tw/~fuh/personal/LSVM.ALinguisticallySemanticVoxelMapEmpoweredbyCLIPEmbeddingforGeneralPurposes.pdf)

[Empowered by CLIP Embedding for General Purposes](https://www.csie.ntu.edu.tw/~fuh/personal/LSVM.ALinguisticallySemanticVoxelMapEmpoweredbyCLIPEmbeddingforGeneralPurposes.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, SunLinkSea, Taiwan, Paper# 7, pp. 1-8, 2022.

Y. R. Xiao and C. S. Fuh, “Form Detection & Label Optical Character Recognition,” *Proceedings of Conference on Information Technology and Applications in Outlying Islands*, Peng-Hu, Taiwan, Paper# P3-9, pp. 1319-1325, 2022.

C. H. Yang and C. S. Fuh, “[Orchid Type Recognition and Classification](https://www.csie.ntu.edu.tw/~fuh/personal/OrchidTypeRecognitionandClassification.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, SunLinkSea, Taiwan, Paper# 2, pp. 1-8, 2022.

K. C. Yen, C. K. Li, Y. H. Shao, K. R. You, and C. S. Fuh, “YenRecommend: Parameter Recommendation for Printed Circuit Board Defect Inspection System for X-ray Images,” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, SunLinkSea, Taiwan, Paper# 24, pp. 1-8, 2022.

C. W. Yu and C. S. Fuh, “[Convolutional Neural Network for Cryptocurrency Market Pattern Identification](https://www.csie.ntu.edu.tw/~fuh/personal/ConvolutionalNeuralNetworkforCryptocurrencyMarketPatternIdentification.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, SunLinkSea, Taiwan, Paper# 5, pp. 1-8, 2022.

A. Yurusov and C. S. Fuh, “Noise Reduction for Surgical Camera Recording System,” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, SunLinkSea, Taiwan, Paper# 6, pp. 1-10, 2022.

Y. W. Chen, S. C. Pei, and C. S. Fuh, “[DTLN: A Deep Two-branch Lightening Network with Saturation Adjustment for Low-light Enhancement](https://www.csie.ntu.edu.tw/~fuh/personal/DTLNADeepTwo-BranchLighteningNetworkwithSaturationAdjustmentforLow-LightEnhancement.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, virtual, Paper# 10, pp. 1-11, 2021.

C. Y. Lai and C. S. Fuh, “Solving Product Matching Problem by Ensemble Method,” Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing, virtual, Paper# 9, pp. 1-8, 2021.

E. T. Lin and C. S. Fuh, “[Digit Recognition Competition on Kaggle](https://www.csie.ntu.edu.tw/~fuh/personal/DigitRecognitionCompetitiononKaggle.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, virtual, Paper# 8, pp. 1-7, 2021.

J. L. Liou, A. Tsai, C. S. Fuh and F. Huang, “[Adversarial Network for LiDAR Point Cloud](https://www.csie.ntu.edu.tw/~fuh/personal/AdversarialNetworkforLiDARPointCloudSegmentation.pdf)

[Segmentation](https://www.csie.ntu.edu.tw/~fuh/personal/AdversarialNetworkforLiDARPointCloudSegmentation.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, virtual, Paper# 88, pp. 1-9, 2021.

C. W. Tseng and C. S. Fuh, “[Handwritten Chinese Character Recognition](https://www.csie.ntu.edu.tw/~fuh/personal/HandwrittenChineseCharacterRecognition.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, virtual, Paper# 7, pp. 1-8, 2021.

C. Y. Chang and C. S. Fuh, “[Mango Image Recognition Challenge: Grade Classification](https://www.csie.ntu.edu.tw/~fuh/personal/MangoImageRecognitionChallengeGradeClassification.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Hsinchu, Taiwan, Paper# 2, pp. 1-8, 2020.

C. W. Chen and C. S. Fuh, “[Deep Learning for Polyp Detection in Colonoscopy](https://www.csie.ntu.edu.tw/~fuh/personal/DeepLearningforPolypDetectioninColonoscopy.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Hsinchu, Taiwan, Paper# 3, pp. 1-8, 2020.

P. T. Chen, C. S. Fuh, and J. H. Chen, “[Convolutional Neural Network for MR Image Noise Removal](https://www.csie.ntu.edu.tw/~fuh/personal/ConvolutionalNeuralNetworkforMRImageNoiseRemoval.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Hsinchu, Taiwan, CVGIP Second Best Paper, Paper# 13, pp. 1-8, 2020.

X. J. Chen and C. S. Fuh, “[MNet: Fruit Lesion Classification Convnet Design via Efficient Neural Architecture Search](https://www.csie.ntu.edu.tw/~fuh/personal/MNetFruitLesionClassificationConvnetDesignviaEfficientNeuralArchitectureSearch.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Hsinchu, Taiwan, CVGIP Second Best Paper, Paper# 4, pp. 1-8, 2020.

Y. C. Cheng, Y. C. Wang, and C. S. Fuh, “[Domain-Generalized Few-Shot Classification](https://www.csie.ntu.edu.tw/~fuh/personal/Domain-GeneralizedFew-ShotClassificationviaCross-DomainEpisodicMeta-Learning.pdf)

[via Cross-Domain Episodic Meta-Learning](https://www.csie.ntu.edu.tw/~fuh/personal/Domain-GeneralizedFew-ShotClassificationviaCross-DomainEpisodicMeta-Learning.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Hsinchu, Taiwan, Paper# 18, pp. 1-8, 2020.

F. Y. Hsu, C. S. Fuh, and J. H. Chen, “[Super Resolution Reconstruction Using Generative Adversarial Network for Wideband Magnetic Resonance Imaging](https://www.csie.ntu.edu.tw/~fuh/personal/Super-ResolutionReconstructionUsingGenerativeAdversarialNetworkforWidebandMagnetic.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Hsinchu, Taiwan, Paper# 14, pp. 1-8, 2020.

S. Y. Huang, C. A. Yang, and C. S. Fuh, “[Mango-Terminator: Deep Network for Mango Classification](https://www.csie.ntu.edu.tw/~fuh/personal/Mango-TerminatorDeepNetworkforMangoClassification.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Hsinchu, Taiwan, Paper# 19, pp. 1-8, 2020.

C. S. Lin, Y. C. Cheng, Y. C. Wang, and C. S. Fuh, “[Feature Consistency for Domain Generalized Person Re-Identification](https://www.csie.ntu.edu.tw/~fuh/personal/FeatureConsistencyforDomainGeneralizedPersonRe-Identification.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Hsinchu, Taiwan, CSHuang Second Best Paper, Paper# 21, pp. 1-6, 2020.

H. H. Tsai and C. S. Fuh, “[Liver Segmentation with 2D UNet](https://www.csie.ntu.edu.tw/~fuh/personal/LiverSegmentationwith2DUNet.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Hsinchu, Taiwan, Paper# 6, pp. 1-9, 2020.

F. E. Yang, Y. C. Yang, and C. S. Fuh, “[Dual-MTGAN: Stochastic and Deterministic Motion Transfer for Image-to-Video Synthesis](https://www.csie.ntu.edu.tw/~fuh/personal/Dual-MTGANStochasticandDeterministicMotionTransferforImage-to-VideoSynthesis.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Hsinchu, Taiwan, CSHuang Best Paper, Paper# 20, pp. 1-9, 2020.

S. F. Chen and C. S. Fuh, “[A Study of Case Search by Portrait](https://www.csie.ntu.edu.tw/~fuh/personal/AStudyofCastSearchbyPortrait.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taitung, Taiwan, P4, Paper# CV-0024, pp. 1-8, 2019.

W. J. Chung and C. S. Fuh, “[Panorama Stitching](https://www.csie.ntu.edu.tw/~fuh/personal/PanoramaStitching.WJChung.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taitung, Taiwan, P18, Paper# CG-0002, pp. 1-8, 2019.

Y. K. Fan and C. S. Fuh, “[Multi-Exposure Image Fusion Based on Structure Consistency](https://www.csie.ntu.edu.tw/~fuh/personal/Multi-ExposureImageFusionBasedonStructureConsistency.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taitung, Taiwan, E4-6, Paper# IP-0002, pp. 1-8, 2019.

C. C. Fu and C. S. Fuh, “[Testing YOLOV3 on Rainy Condition](https://www.csie.ntu.edu.tw/~fuh/personal/TestingYOLOV3onRainyCondition.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taitung, Taiwan, C1-6, Paper# CV-0009, pp. 1-8, 2019.

H. R. Huang and C. S. Fuh, “[Breast Tumors Diagnosis for Ultrasound Image Using Convolutional Neural Network](https://www.csie.ntu.edu.tw/~fuh/personal/BreastTumorsDiagnosisforUltrasoundImageUsingConvolutionalNeuralNetwork.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taitung, Taiwan, P5, Paper# IP-0003, pp. 1-8, 2019.

P. H. Huang, Y. C. Chen, and C. S. Fuh, “[String Finding Based on Application Connected to Server](https://www.csie.ntu.edu.tw/~fuh/personal/StringFindingBasedonApplicationConnectedtoServer.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taitung, Taiwan, D1-1, Paper# CV-0007, pp. 1-8, 2019.

S. Y. Huang and C. S. Fuh, “[Panorama Stitching](https://www.csie.ntu.edu.tw/~fuh/personal/PanoramaStitching.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taitung, Taiwan, A1-6, Paper# CV-0010, pp. 1-8, 2019.

C. Y. Lee, C. M. Hsu, and C. S. Fuh, “[Faster Face Changing Tech](https://www.csie.ntu.edu.tw/~fuh/personal/FasterFaceChangingTech.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taitung, Taiwan,   
D2-1, Paper# CV-0006, pp. 1-8, 2019.

Y. H. Lee, Y. C. Wang, and C. S. Fuh, “[Domain-Aware Zero-Shot Learning with Generative Models](https://www.csie.ntu.edu.tw/~fuh/personal/Domain-AwareZero-ShotLearningwithGenerativeModels.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taitung, Taiwan, B2-1, Paper# CV-0012, pp. 1-9, 2019.

S. H. Li and C. S. Fuh, “[Application of Automatic Mosaic for Video Based on YOLO](https://www.csie.ntu.edu.tw/~fuh/personal/ApplicationofAutomaticMosaicforVideoBasedonYOLO.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taitung, Taiwan, C1-3, Paper# PR-0001, pp. 1-8, 2019.

Y. Y. Lu, Y. R. Wu, and C. S. Fuh, “[3D Reconstruction of Multi-View Camera and Markerless Tracking of Human Pose and Baseball](https://www.csie.ntu.edu.tw/~fuh/personal/3DReconstructionofMulti-ViewCameraandMarkerlessTrackingofHumanPoseandBaseball.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taitung, Taiwan, C3-2, Paper# CV-0034, pp. 1-6, 2019.

C. Y. Shih, P. H. Huang, S. L. Chung, S. F. Chen, Y. C. Wang, and C. S. Fuh, “[Flame: A New CNN Module for Large Model Compression](https://www.csie.ntu.edu.tw/~fuh/personal/FlameANewCNNModuleforLargeModelCompression.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taitung, Taiwan, Second Best Paper Award, B2-3, Paper# CV-0022, pp. 1-7, 2019.

S. M. Wang and C. S. Fuh, “[Face Generation Based on Generative Adversarial Network for Data Augmentation](https://www.csie.ntu.edu.tw/~fuh/personal/FaceGenerationBasedonGenerativeAdversarialNetworkforDataAugmentation.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taitung, Taiwan, P7, Paper# OT-0001, pp. 1-6, 2019.

J. R. Wong and C. S. Fuh, “[Burst Denoising with Global-Patch-RNN Model](https://www.csie.ntu.edu.tw/~fuh/personal/BurstDenoisingwithGlobal-Patch-RNNModel.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taitung, Taiwan, E4-1, Paper# CG-0001, pp. 1-5, 2019.

C. W. Wu, J. J. Ding, and C. S. Fuh, “[The Improvement of Scale-Invariant Feature Transform and Image Tracking](https://www.csie.ntu.edu.tw/~fuh/personal/TheImprovementofScale-InvariantFeatureTransformandImageTracking.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taitung, Taiwan, A2-3, Paper# SAS-0003, pp. 1-8, 2019.

J. T. Wu, J. J. Ding, and C. S. Fuh, “[Optimization of Watershed Segmentation Method](https://www.csie.ntu.edu.tw/~fuh/personal/OptimizationofWatershedSegmentationMethod.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taitung, Taiwan, E5-5, Paper# IP-0004, pp. 1-8, 2019.

Y. Y. Cheng and C. S. Fuh, “[Feature-Based Alignment for GIF Animation](https://www.csie.ntu.edu.tw/~fuh/personal/Feature-basedAlignmentforGIFAnimation.13.B3-5.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Tainan, Taiwan, B3-5, Paper# 13, pp. 1-8, 2018.

C. S. Chiang and C. S. Fuh, “[An SVM Approach for Realtime Soccer Ball and Robot Detector](https://www.csie.ntu.edu.tw/~fuh/personal/AnSVMApproachforRealtimeSoccerBallandRobotDetector.58.C1-5.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Tainan, Taiwan, C1-5, Paper# 58, pp. 1-6, 2018.

T. F. Chiu and C. S. Fuh, “[Real Geometric Edges Aided to Preserving the Depth Discontinuities in Dense Stereo Matching](https://www.csie.ntu.edu.tw/~fuh/personal/RealGeometricEdgesAidedtoPreservingtheDepthDiscontinuities.22.B3-4.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Tainan, Taiwan, B3-4, Paper# 22, pp.1-8, 2018.

T. A. Hsieh and C. S. Fuh, “[3D Face Identification and Reconstruction with Range Sensor](https://www.csie.ntu.edu.tw/~fuh/personal/3DFaceIdentificationandReconstructionwithRangeSensor.31.A3-3.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Tainan, Taiwan, A3-3, Paper# 31, pp.1-10, 2018.

T. H. Hu, H. Y. Chen, and C. S. Fuh, “[Low-cost Soccer Detection for Humanoid Robot](https://www.csie.ntu.edu.tw/~fuh/personal/Low-costSoccerDetectionforHumanoidRobot.23.C1-6.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Tainan, Taiwan, C1-6, Paper# 23, pp.1-8, 2018.

Z. W. Huang, Y. H. Hong, Y. C. Chen, and C. S. Fuh, “[Human Recognition in the CCTV Footage](https://www.csie.ntu.edu.tw/~fuh/personal/HumanRecognitionintheCCTVFootage.15.A1-4.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Tainan, Taiwan, A1-4, Paper# 15, pp. 1-8, 2018.

Z. X. Huang and C. S. Fuh, “[Style Transfer Using Deep Learning](https://www.csie.ntu.edu.tw/~fuh/personal/StyleTransferUsingDeepLearning.9.A6-2.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Tainan, Taiwan, A6-2, Paper# 9, pp. 1-8, 2018.

C. Y. Kuo and C. S. Fuh, “[Hand Segmentation Used in Virtual Environment](https://www.csie.ntu.edu.tw/~fuh/personal/HandSegmentationUsedinVirtualEnvironment.11.B2-4.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Tainan, Taiwan, B2-4, Paper# 11, pp. 1-7, 2018.

Y. J. Li, Y. C. Wang, and C. S. Fuh, “[Unsupervised Deep Transfer Learning Approach to Person Re-identification](https://www.csie.ntu.edu.tw/~fuh/personal/UnsupervisedDeepTransferLearningApproachtoPersonRe-identification.14.A5-1.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Tainan, Taiwan, Second Best Paper Award, A5-1, Paper# 14, pp. 1-8, 2018.

Y. J. Lin and C. S. Fuh, “[Generating Anime Faces from Human Faces with Adversarial Networks](https://www.csie.ntu.edu.tw/~fuh/personal/GeneratingAnimeFacesfromHumanFaceswithAdversarialNetworks.10.A6-1.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Tainan, Taiwan, A6-1, Paper# 10, pp. 1-7, 2018.

Y. H. Liu and C. S. Fuh, “[Motion Tracking of Brachiation Robot Based on LabVIEW Using Seamless Integration Technology](https://www.csie.ntu.edu.tw/~fuh/personal/MotionTrackingofBrachiationRobotBasedonLabVIEW.21.C1-1.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Tainan, Taiwan, C1-1, Paper# 21, pp. 1-8, 2018.

Y. T. Liu, G. S. Kuo, T. S. Yang, P. C. Hsu, and C. S. Fuh, “[Few-shot Learning with Difficult Setting](https://www.csie.ntu.edu.tw/~fuh/personal/Few-shotLearningwithDifficultSetting.42.A5-3.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Tainan, Taiwan, A5-3, Paper# 42, pp. 1-8, 2018.

C. H. Tseng, Y. S. Sung, and C. S. Fuh, “[An Eardrum Image Capture Guidance Program for the Otoscope](https://www.csie.ntu.edu.tw/~fuh/personal/AnEardrumImageCaptureGuidanceProgramfortheOtoscope.19.C5-3.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Tainan, Taiwan, C5-3, Paper# 19, pp. 1-8, 2018.

P. Wu and C. S. Fuh, “[Implementation of Bundle Adjustment and 3D Modeling](https://www.csie.ntu.edu.tw/~fuh/personal/ImplementationofBundleAdjustmentand3DModeling.12.B6-3.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Tainan, Taiwan, Second Best Paper Award, B6-3, Paper# 12, pp. 1-8, 2018.

P. W. Wu and C. S. Fuh, “[Autostar-GAN: Multi-domain Image-to-image Translation with Unlabeled Data](https://www.csie.ntu.edu.tw/~fuh/personal/Autostar-GANMulti-domainImage-to-imageTranslationwithUnlabeledData.24.A6-3.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Tainan, Taiwan, Second Best Paper Award, A6-3, Paper# 24, pp. 1-8, 2018.

J. W. Yan, Y. C. Wang, C. S. Fuh, T. S. Kuo, and K. S. Tseng, “[Deep Aggregation Network on Satellite Imagery](https://www.csie.ntu.edu.tw/~fuh/personal/DeepAggregationNetworkonSatelliteImagery.20.A5-2.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Tainan, Taiwan, A5-2, Paper# 20, pp. 1-6, 2018.

C. J. Yang and C. S. Fuh, “[Noise Estimation and Reduction with EMVA1288](https://www.csie.ntu.edu.tw/~fuh/personal/NoiseEstimationandReductionwithEMVA1288.47.B5-1.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Tainan, Taiwan, B5-1, Paper# 47, pp. 1-8, 2018.

C. H. Chang, C. S. Fuh, and S. W. Wang, “[Rice Field Interpretation with Temporal Sentinel-1 Synthetic Aperture Radar Image Data](https://www.csie.ntu.edu.tw/~fuh/personal/RiceFieldInterpretationwithTemporalSentinel-1SyntheticAperture.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, SunLinkSea, Taiwan, B7-3, Paper# SS06-03, pp. 1-8, 2017.

B. Chen, C. S. Fuh, and S. W. Wang, “[Multimodal Pattern Mining from Twitter Data for Image Concept Extraction](https://www.csie.ntu.edu.tw/~fuh/personal/MultimodalPatternMiningfromTwitterDataforImageConceptExtraction.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, SunLinkSea, Taiwan, C7-6, Paper# 47, pp. 1-8, 2017.

H. Y. Chen, C. S. Fuh, C. S. Wong, T. C. Tung, Y. H. Lee, and T. C. Tsan, “[3D Reconstruction with X-Ray Images](https://www.csie.ntu.edu.tw/~fuh/personal/3DReconstructionwithX-RayImages.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, SunLinkSea, Taiwan, D5-1, Paper# 30, pp. 1-9, 2017.

S. C. Pei, W. L. Su, and C. S. Fuh, “[Local and Global Contrast Preserving Decolorization Using Gradient Matrix Correlation](https://www.csie.ntu.edu.tw/~fuh/personal/LocalandGlobalContrastPreservingDecolorizationUsingGradientMatrixCorrelation.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, SunLinkSea, Taiwan, D7-6, Paper# 20, pp. 1-8, 2017.

Note: Caution: Our many IPPR CVGIP papers are more of encouraging students to go through Advanced Computer Vision term-project research, English paper writing and publication process, presentation, and research idea exchange discussion and improvement. Six weeks after starting spring semester, student has to hand in one page of English proposal containing title, abstract, background, theories, steps, expected results, conclusion, and references. Every two weeks, student will expand two pages and drop by my office to report research progress, and I will revise and advise current drawback and future improvement direction. I have more than 30 students, and each student only has 20 minutes, thus time is too short for rigorous revision. At end of spring semester, student will have 8 pages of English research report and submits to IPPR CVGIP. I will subsidize half of registration and hotel fees, if accepted. Student will have great chance to present research results and learn from other excellent researchers. Thus some of our IPPR CVGIP papers may not meet rigorous academic standard due to too many students and too short meeting time. I apologize and sincerely hope my encouragement and student’s valuable learning experience will make up our inferior academic standard.

H. Y. Chen, J. J. Ding, and C. S. Fuh, “[A Region of Interest Based Surveillance Video Coding](https://www.csie.ntu.edu.tw/~fuh/personal/ARegionofInterestBasedSurveillanceVideoCoding.CVGIP_2016_paper_16.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Keelung, Taiwan, D2-2, Paper# 16, pp. 1-8, 2016.

H. Y. Chen, C. F. Lin, Y. H. Hsiung, and C. S. Fuh, “[Ball Grid Array Inspection with X-Ray Images](https://www.csie.ntu.edu.tw/~fuh/personal/BallGridArrayInspectionwihtX-RayImages.CVGIP_2016_paper_2.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Keelung, Taiwan, C5-1, Paper# 2, pp. 1-8, 2016.

W. Y. Chen and C. S. Fuh, “[Object Co-Segmentation with Regression Siamese Network](https://www.csie.ntu.edu.tw/~fuh/personal/ObjectCo-SegmentationwithRegressionSiameseNetwork.CVGIP_2016_paper_55.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Keelung, Taiwan, A3-4, Paper# 55, pp. 1-8, 2016.

T. Y. Hsu and C. S. Fuh, “[Pedestrian Contour Detection Based on Image Segmentation](https://www.csie.ntu.edu.tw/~fuh/personal/PedestrianContourDetectionBasedonImageSegmentation.CVGIP_2016_paper_23.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Keelung, Taiwan, D3-1, Paper# 23, pp. 1-6, 2016.

Q. Liang, X. B. Qian, and C. S. Fuh, “[Positioning-Based Image Retrieval Application](https://www.csie.ntu.edu.tw/~fuh/personal/Positioning-BasedImageRetrievalApplication.CVGIP_2016_paper_32.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Keelung, Taiwan, C6-2, Paper# 32, pp. 1-6, 2016.

S. H. Lin and C. S. Fuh, “[Comparisons between Enhanced Brute Force Algorithm and Horn & Schunck Method on Motion Estimation](https://www.csie.ntu.edu.tw/~fuh/personal/ComparisonbetweenEnhancedBruteForceAlgorithmandHornandSchunckMethodonMotionEstimation.CVGIP_2016_paper_13.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Keelung, Taiwan, A6-2, Paper# 13, pp. 1-9, 2016.

Y. C. Liu, P. H. Ciou, and C. S. Fuh, “[2D + 3D Face Morphing](https://www.csie.ntu.edu.tw/~fuh/personal/2D+3DFaceMorphing.CVGIP_2016_paper_14.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Keelung, Taiwan, C5-5, Paper# 14, pp. 1-8, 2016.

S. C. Pei, H. Y. Tsai, and C. S. Fuh, “[Representation of Image by Local Symmetry Decomposition](https://www.csie.ntu.edu.tw/~fuh/personal/RepresentationofImagebyLocalSymmetryDecomposition.CVGIP_2016_paper_9.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Keelung, Taiwan, (C. H. Huang Best Paper Award B),C6-1, Paper# 9, pp. 1-8, 2016.

K. H. Tu and C. S. Fuh, “[The Speed-Limit Sign Detection and Recognition System](https://www.csie.ntu.edu.tw/~fuh/personal/TheSpeedLimitSignDetectionandRecognitionSystem.CVGIP_2016_paper_69.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Keelung, Taiwan, E1-5, Paper# 69, pp. 1-8, 2016.

M. Y. Wu, T. Y. Chen, L. C. Fu, and C. S. Fuh, “[Deep Learning for Integrated Hand Detection and Pose Estimation](https://www.csie.ntu.edu.tw/~fuh/personal/DeepLearningforIntegratedHandDetectionandPoseEstimation.CVGIP_2016_paper_19.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Keelung, Taiwan, (IPPR Best Paper Award B), A4-1, Paper# 19, pp. 1-8, 2016.

T. C. Young, S. Smith, C. K. Yang, and C. S. Fuh, “[An Interactive Augmented Reality Furniture Customization System](https://www.csie.ntu.edu.tw/~fuh/personal/AnInteractiveAugmentedRealityFurnitureCustomizationSystem.CVGIP_2016_paper_27.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Keelung, Taiwan, A5-2, Paper# 27, pp. 1-6, 2016.

C. H. Yu, T. Lee, C. W. Chen, M. R. Hsieh, and C. S. Fuh, “[Human Segmentation with Nvidia-TX1](https://www.csie.ntu.edu.tw/~fuh/personal/HumanSegmentationwithNvidia-TX1.CVGIP_2016_paper_12.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Keelung, Taiwan, A4-3, Paper# 12, pp. 1-8, 2016.

Y. R. Chang and C. S. Fuh, “[Elliptic-Cylindrical Panorama](http://www.csie.ntu.edu.tw/~fuh/personal/EllipticCylindricalPanorama.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Yilan, Taiwan, P2-15, Paper# 31, pp. 1-7, 2015.

T. Y. Chen, C. Y. Liu, C. S. Fuh, and L. C. Fu, “[Sparse Representation of Skeletal Tree for Action Recognition](http://www.csie.ntu.edu.tw/~fuh/personal/SparseRepresentationofSkeletalTreeforActionRecognition.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Yilan, Taiwan, C3-6, Paper# 95, pp. 1-8, 2015.

C. H. Chu and C. S. Fuh, “[An Integrated Display and Detection 3D Interaction System](http://www.csie.ntu.edu.tw/~fuh/personal/AnIntegratedDisplayandDetection3DInteractionSystem.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Yilan, Taiwan, P2-6, Paper# 76, pp. 1-6, 2015.

P. J. Lai and C. S. Fuh, “[Transparent Object Detection Using Regions with Convolutional Neural Network](http://www.csie.ntu.edu.tw/~fuh/personal/TransparentObjectDetectionUsingRegionswithConvolutionalNeuralNetwork.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Yilan, Taiwan, P1-12, Paper# 56, pp. 1-8, 2015.

Y. C. Lin and C. S. Fuh, “[Pseudo HDR Video Using Inverse Tone Mapping](http://www.csie.ntu.edu.tw/~fuh/personal/PseudoHDRVideoUsingInverseToneMapping.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Yilan, Taiwan, P1-2, Paper# 32, pp. 1-5, 2015.

Y. J. Peng and C. S. Fuh, “[Segmentation-Based Image Copy-Move Forgery Detection Method with Consideration of Spatial Correlation](http://www.csie.ntu.edu.tw/~fuh/personal/SegmentationBasedImageCopyMoveForgeryDetectionMethodwithConsiderationofSpatialCorrelation.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Yilan, Taiwan, P2-4, Paper# 39, pp. 1-8, 2015.

Y. F. Shao, C. Wang, and C. S. Fuh, “[Eyelasso: Real-World Object Selection Using Gaze-Based Gestures](http://www.csie.ntu.edu.tw/~fuh/personal/Eyelasso-RealWorldObjectSelectionUsingGazeBasedGestures.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Yilan, Taiwan, Best Paper Award B Class, C3-3, Paper# 42, pp. 1-6, 2015.

C. W. Su and C. S. Fuh, “[Automatic Music Score Recognition](http://www.csie.ntu.edu.tw/~fuh/personal/AutomaticMusicScoreRecognition.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Yilan, Taiwan, P2-8, Paper# 40, pp. 1-3, 2015.

Y. C. Tsai and C. S. Fuh, “[Office Entrance Control with Face Recognition](http://www.csie.ntu.edu.tw/~fuh/personal/OfficeEntranceControlwithFaceRecognition.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Yilan, Taiwan, A6-5, Paper# 16, pp. 1-8, 2015.

C. H. Wang and C. S. Fuh, “[Real-Time Hand Gesture Recognition Based on Support Vector Machine with Depth Sensor](http://www.csie.ntu.edu.tw/~fuh/personal/RealTimeHandGestureRecognitionBasedonSupportVectorMachinewithDepthSensor.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Yilan, Taiwan, P3-14, Paper# 37, pp. 1-8, 2015.

Z. Y. Gao, T. R. Chiang, C. F. Lin, Y. C. Tsai, and C. S. Fuh, “[Realtime Pedestrian Detection System Using Combinations of Multiple Features and Object Tracking Method](http://www.csie.ntu.edu.tw/~fuh/personal/RealtimePedestrianDetectionSystemUsingCombinationsofMultipleFeatures.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kenting, Taiwan, B1-2, Paper# 101, pp. 1-10, 2014.

NSC 101-2221-E-002 -194, NSC 102- 2221-E-002 -177

H. C. Ho, C. S. Fuh, and F. L. Lian “[Object Tracking Algorithm Based on Combination of Edge and Color Information](http://www.csie.ntu.edu.tw/~fuh/personal/ObjectTrackingAlgorithmBasedonCombinationofEdgeandColorInformation.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kenting, Taiwan, C1-6, Paper# 236, pp. 1-6, 2014.

C. H. Lee, C. F. Lin, and C. S. Fuh, “[Super-Resolution Image Restoration from Image Sequence](http://www.csie.ntu.edu.tw/~fuh/personal/SuperResolutionImageRestorationfromImageSequence.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kenting, Taiwan, F4-2, Paper# 67, pp. 1-9, 2014.

NSC 101-2221-E-002 -194, NSC 102- 2221-E-002 -177

Y. W. Wang, W. Y. Wang, and C. S. Fuh, “[Illumination Normalization in Face Recognition Using DCT and Supporting Vector Machine (SVM)](http://www.csie.ntu.edu.tw/~fuh/personal/IlluminationNormalizationinFaceRecognitionUsingDCTandSupportingVectorMachine(SVM).pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kenting, Taiwan, C2-2, Paper# 79, pp. 1-5, 2014.

T. H. Yu, C. S. Fuh, and F. L. Lian “[3D Indoor Environment Construction from Monocular Camera on Quadricopter](http://www.csie.ntu.edu.tw/~fuh/personal/3DIndoorEnvironmentConstructionfromMonocularCameraonQuadricopter.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kenting, Taiwan, A6-3, Paper# 187, pp. 1-6, 2014.

D. Y. Choul, Z. Y. Gao, S. T. Huang, and C. S. Fuh, “[Hand Gesture Recognition, Tracking, and Project to a 3D Model](http://www.csie.ntu.edu.tw/~fuh/personal/HandGestureRecognitionTrackingandProject.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Ilan, Taiwan, F1-1, pp. 1-7, 2013.

NSC 98-2221-E-002 -150 -MY3, NSC 101-2221-E-002 -194

C. M. Lu, S. J. Yang, and C. S. Fuh, “[Edge-Aware Image Processing with a Laplacian Pyramid by Using Cascade Piecewise Linear Processing](http://www.csie.ntu.edu.tw/~fuh/personal/Edge-AwareImageProcessingwithaLaplacian.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Ilan, Taiwan, F4-2, pp. 1-7, 2013.

NSC 98-2221-E-002 -150 -MY3, NSC 101-2221-E-002 -194

C. Y. Wang and C. S. Fuh, “[A View Synthesis Using Disparity Image](http://www.csie.ntu.edu.tw/~fuh/personal/AViewSynthesisUsingDisparityImage.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Ilan, Taiwan, E4-1, pp. 1-4, 2013.

C. C. Lee and C. S. Fuh, “[High Dynamic Range Image with Two Exposures](http://www.csie.ntu.edu.tw/~fuh/personal/HighDyanamicRangeImagewithTwoExposures.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Sun Moon Lake, Taiwan, C6-1, pp. 1-8, 2012.

P. C. Lee and C. S. Fuh, “[A Tone Mapping Algorithm with Detail Enhancement Based on Retinex Theory](http://www.csie.ntu.edu.tw/~fuh/personal/AToneMappingAlgorithmwithDetailEnhancement.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Sun Moon Lake, Taiwan, C6-3, pp. 1-8, 2012.

C. F. Lin and C. S. Fuh, “[Location Based Game: Tic-Tac-Toe](http://www.csie.ntu.edu.tw/~fuh/personal/LocationBasedGameTicTacToe.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Sun Moon Lake, Taiwan, D1-4, pp. 1-7, 2012.

C. F. Lin and C. S. Fuh, “[Uncle Sand: A Sand Drawing Application in iPad](http://www.csie.ntu.edu.tw/~fuh/personal/UncleSandASandDrawingApplicationiniPad.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Sun Moon Lake, Taiwan, C5-4, pp. 1-8, 2012.

C. W. Chen, C. T. Lin, Y. L. Sung, and C. S. Fuh, “[Defocus Magnification with CUDA](http://www.csie.ntu.edu.tw/~fuh/personal/DefocusMagnificationwithCUDA.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Chia-Yi, Taiwan, A4-5, pp. 1-7, 2011.

W. H. Chen and C. S. Fuh, “[Color Interpolation for Cross-Talk Noise Reduction](http://www.csie.ntu.edu.tw/~fuh/personal/ColorInterpolationforCross-TalkNoiseReduction.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Chia-Yi, Taiwan, A6-1, pp. 1-8, 2011.

W. H. Chen and C. S. Fuh, “[Noise Reduction in Raw Data Domain](http://www.csie.ntu.edu.tw/~fuh/personal/NoiseReductioninRawDataDomain.A2-2-0103.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kaohsiung, Taiwan, A2-2-0103, p. 63, 2010.

D. Y. Huang and C. S. Fuh, “[Face Beautification and Color Enhancement with Scene Mode Detection](http://www.csie.ntu.edu.tw/~fuh/personal/FaceBeautificationandColorEnhancement.A2-1-0040.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kaohsiung, Taiwan, A2-1-0040, p. 63, 2010.

C. F. Chang and C. S. Fuh, “[Light Compensation](http://www.csie.ntu.edu.tw/~fuh/personal/LightCompensation.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Shitou, Taiwan, B3-9, p. 87, 2009.

K. Y. Chen, C. S. Fuh, K. B. Sung, and C. Y. Tsai, “[High Dynamic Range Image Processing to Screen Diabetic Retinopathy](http://www.csie.ntu.edu.tw/~fuh/personal/HighDynamicRangeImageProcessingtoScreenDiabetic.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Shitou, Taiwan, D4-1, p. 156, 2009.

W. S. Chen and C. S. Fuh, “[Process Monitoring for LCD AOI](http://www.csie.ntu.edu.tw/~fuh/personal/ProcessMonitoringforLCD-AOI.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Shitou, Taiwan, D2-15, p. 147, 2009.

D. Y. Huang and C. S. Fuh, “[Automatic Face Color Enhancement](http://www.csie.ntu.edu.tw/~fuh/personal/AutomaticSkinColorEnhancement.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Shitou, Taiwan, D6-8, p. 175, 2009.

W. L. Huang and C. S. Fuh, “[Shape from Shading-Based Eigenface](http://www.csie.ntu.edu.tw/~fuh/personal/ShapefromShadingBasedEigenface.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Shitou, Taiwan, A5-7, p. 109, 2009.

Y. H. Huang and C. S. Fuh, “[Face Detection and Smile Detection](http://www.csie.ntu.edu.tw/~fuh/personal/FaceDetectionandSmileDetection.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Shitou, Taiwan, A5-6, p. 108, 2009.

C. S. Liao, C. S. Fuh, and W. L. Huang “[Decrease the Dimension of Detecting Circles and Ellipses with Hough Transform](http://www.csie.ntu.edu.tw/~fuh/personal/DecreasetheDimensionofDetectingCirclesandEllipses.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Shitou, Taiwan, D5-15, p. 171, 2009.

T. S. Peng and C. S. Fuh, “[Color-Based Printed Circuit Board Solder Segmentation](http://www.csie.ntu.edu.tw/~fuh/personal/ColorBasedPrintedCircuitBoardSolderSegmentaion.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Shitou, Taiwan, C6-3, p. 128, 2009.

H. Y. Shen and C. S. Fuh, “[New Hierarchical Noise Reduction](http://www.csie.ntu.edu.tw/~fuh/personal/NewHierarchicalNoiseReduction.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Shitou, Taiwan, D6-1, p. 172, 2009.

J. M. Wang, S. W. Chen, S. Cherng, and C. S. Fuh, “[People Counting System Based on Particle Filter with Memory States for Improvement](http://www.csie.ntu.edu.tw/~fuh/personal/PeopleCountingSystemBasedonParticleFilterwith.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Shitou, Taiwan, A6-4, p. 119, 2009.

J. H. Yu, K. L. Chung, W. J. Yang, W. M. Yan, and C. S. Fuh, “[Efficient Zooming Algorithm for Color Filter Array Using Gradient Edge Detection Masks and Color Differences](http://www.csie.ntu.edu.tw/~fuh/personal/EfficientZoomingAlgorithmforColorFilterArray.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*,Ilan, Taiwan, (Best Student Paper Award), Session C3-4,paper# 92, 2008.

J. M. Wang, S. W. Chen, S. Cherng, and C. S. Fuh, “[People Counting Using Fisheye Camera](http://www.csie.ntu.edu.tw/~fuh/personal/PeopleCountingUsingFisheyeCamera.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Sanyi, Taiwan, A5-4, pp. 808-813, 2007.

C. K. Liaw, C. S. Fuh, R. S. Yang, and S. M. Hou, “[A New Tool for Measuring Cup Orientation in Total Hip Arthroplasty](http://www.csie.ntu.edu.tw/~fuh/personal/ImprovedMethodofMeasuringAnteversion.pdf),” *Proceedings of Chinese Orthopedic Conference*, 2006.

C. H. Chang and C. S. Fuh, “[Auto Focus Using Adaptive Step Size Search and Zoom Tracking Algorithm](http://www.csie.ntu.edu.tw/~fuh/personal/AutoFocusUsingAdaptiveStepSizeSearchandZoom.pdf),” *Proceedings of Conference on Artificial Intelligence and Applications,*Kaohsiung, Taiwan, LF4, p. 22, 2005.

NSC 94-2213-E-002-032 and NSC 93-2213-E-002-073

J. F. Chen and C. S. Fuh, “[Image Stabilization with Best Shot Selector and Super Resolution Reconstruction](http://www.csie.ntu.edu.tw/~fuh/personal/ImageStabilizationwithBestShotSelectorandSuper.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Wanli, Taiwan, A5-7, pp. 1215-1222, 2005.

NSC 94-2213-E-002-032 and NSC 93-2213-E-002-073

C. F. Chien, T. T. Lin and C. S. Fuh, “[A Hierarchical Pyramid Elliptical Hough Transform](http://www.csie.ntu.edu.tw/~fuh/personal/AHierarchicalPyramidEllipticalHoughTransform.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Wanli, Taiwan, D3-4, pp. 566-573, 2005.

J. S. Chu and C. S. Fuh, “[Automatic Exposure with Center / Focus Metering](http://www.csie.ntu.edu.tw/~fuh/personal/AutomaticExposurewithCenterFocusMetering.pdf),” *Proceedings of Conference on Artificial Intelligence and Applications,*Kaohsiung, Taiwan, IS4, p. 56, 2005.

NSC 94-2213-E-002-032 and NSC 93-2213-E-002-073

B. C. Huang and C. S. Fuh, “[Image Pipeline Algorithms for Standard Mobile Imaging Architecture Sensors](http://www.csie.ntu.edu.tw/~fuh/personal/ImagePipelineAlgorithmsforStandardMobileImage.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Wanli, Taiwan, E4-22, pp. 1118-1125, 2005.

NSC 94-2213-E-002-032 and NSC 93-2213-E-002-073

W. S. Liao and C. S. Fuh, “[Autofocus with Automatic Block Selection](http://www.csie.ntu.edu.tw/~fuh/personal/AutofocuswithAutomaticBlockSelection.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Wanli, Taiwan, E4-19, pp. 1096-1103, 2005.

NSC 94-2213-E-002-032 and NSC 93-2213-E-002-073

C. K. Liaw, D. H. Lin, C. G. Wu, H. C. Tai, C. S. Fuh, R. S. Yang, and S. M. Hou, **“**[Automatic Digital PE Wear Measurement](http://www.csie.ntu.edu.tw/~fuh/personal/AutomaticePolyEthyleneWearMeasurement1.pdf)**,”** *Proceedings of Chinese Orthopedic Society Conference*, 2005.

C. K. Liaw, D. H. Lin, C. G. Wu, H. C. Tai, C. S. Fuh, R. S. Yang, and S. M. Hou, **“**[Simulated Radiograph of Total Hip Arthroplasty for Verifying Measuring Instrument](http://www.csie.ntu.edu.tw/~fuh/personal/HeadandCupSimulator2.ppt)**,”** *Proceedings of Chinese Orthopedic Society Conference*, 2005.

C. K. Liaw, D. H. Lin, C. G. Wu, H. C. Tai, C. S. Fuh, R. S. Yang, and S. M. Hou, **“**[Accuracy of Measurement of Acetabulum Anteversion with Radiographs of Total Hip Replacements](http://www.csie.ntu.edu.tw/~fuh/personal/proposal.pdf)**,”** *Proceedings of Chinese Orthopedic Society Conference*, 2005.

Y. M. Lin, K. Y. Chen, and C. S. Fuh, “[Automatic White Balance for Image Pipeline of Digital Still Camera](http://www.csie.ntu.edu.tw/~fuh/personal/AutomaticWhiteBalanceforImagePipelineofDigital.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Wanli, Taiwan, A6-5, pp. 1544-1546, 2005.

P. P. Ou, S. C. Pei, and C. S. Fuh, “[Gradual Combination of Feature-Based Polymorph](http://www.csie.ntu.edu.tw/~fuh/personal/GradualCombinationofFeatureBasedPolymorph.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Wanli, Taiwan, D5-3, pp. 1330-1336, 2005.

NSC93-2213-E-002-059

S. M. Chen and C. S. Fuh, “[The Applications of Least-Square Sphere Fitting in Digital Camera](http://www.csie.ntu.edu.tw/~fuh/personal/TheApplicationsofLeasSquareSphereFittingin.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Hua-Lien, Taiwan, D2-2, 2004.

NSC 92-2213-E-002-072

V. Chikane and C. S. Fuh, “[Automatic White Balance for Digital Still Camera](http://www.csie.ntu.edu.tw/~fuh/personal/CVGIP.AutomaticWhiteBalanceforDigitalStillCamera.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Hua-Lien, Taiwan, (best student paper award) B2-8, 2004.

NSC 92-2213-E-002-072

D. Y. Hsiao, S. C. Pei, and C. S. Fuh, “[Localized Blur Estimation on Photography Images and Applications](http://www.csie.ntu.edu.tw/~fuh/personal/LocalizedBlurEstimationonPhotographyImages.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Hua-Lien, Taiwan, C2-7, 2004.

B. Y. Juang and C. S. Fuh, “[3-D Terrain Reconstruction with Aerial Photography](http://www.csie.ntu.edu.tw/~fuh/personal/3DTerrainReconstructionwithAerialPhotography.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Hua-Lien, Taiwan, P1-24, 2004.

C. K. Liaw, C. G. Wu, D. S. Liu, H. C. Tai, C. S. Fuh, R. S. Yang, and S. M. Hou, **“**[Templater: Solution for Preoperative Planning on Picture Archiving and Communication Systems (PACS)](http://www.csie.ntu.edu.tw/~fuh/personal/OCMEnChuKongExperience.pdf)**,”** *Proceedings of Chinese Orthopedic Society Conference*, 2004.

C. C. Yu and C. S. Fuh, “[Automatic Exposure with Fuzzy Control](http://www.csie.ntu.edu.tw/~fuh/personal/AutomaticExposurewithFuzzyControl.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Hua-Lien, Taiwan, C1-4, 2004.

NSC 92-2213-E-002-072

C. C. Chiang, D. W. Fu, Y. P. Hung, and C. S. Fuh, “[On Extracting Color-Size Features for Image Classification](http://www.csie.ntu.edu.tw/~fuh/personal/Publication_conference_2003_On%20Extracting%20Color-Size%20Features%20for%20Image%20Classification.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kin-Men, Taiwan, pp. 347-354, 2003.

C. M. Chiang and C. S. Fuh, “Polymer Light-Emitting Diode Defect Inspection System,” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kin-Men, Taiwan, pp. 748-755, 2003.

NSC 91-2212-E-002-087

Y. C. Lin, H. W. Tseng, and C. S. Fuh, “[Pornography Detection by Using Support Vector Machine](http://www.csie.ntu.edu.tw/~fuh/personal/PornographyDetectionUsingSupportVectorMachine.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kin-Men, Taiwan, pp. 123-130, 2003.

T. S. Chiou, C. S. Fuh, and V. Chikane, “[Automatic White Balance for Digital Still Camera](http://www.csie.ntu.edu.tw/~fuh/personal/CAIA2002.AutomaticWhiteBalanceforDigital.pdf),” *Proceedings of Conference on Artificial Intelligence and Applications,*Tai-Chung, Taiwan, pp. 475-480, 2002.

NSC 91-2711-3-319-001-SP-24, NSC 91-2212-E-002-087

C. Y. Chen, Y. C. Kuo, and C. S. Fuh, “[An Enhanced Super-Resolution System with Improved Image Registration, Automatic Image Selection, and Image Enhancement](http://www.csie.ntu.edu.tw/~fuh/personal/AnEnhancedSuperResolutionSystemwithImproved.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing* (best paper award), Hsin-Chu, Taiwan, pp. 33, 2002.

C. Y. Fang, S. W. Chen, and C. S. Fuh, “[Environmental Change Detection System Regarding Roads](http://www.csie.ntu.edu.tw/~fuh/personal/EnvironmentalChangeDetectionSystemRegarding.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Kenting, Taiwan, pp. 99, 2001.

NSC 89-2218-E-003-001

C. C. Chang, C. S. Fuh, and K. R. Lu, “Scene Change Detection Using Color Average and Histogram,” *Proceedings of ROC Automatic Control Workshop,* Taoyuan, Taiwan, pp. 1082-1087, 2001.

NSC 88-2213-E-002-031

Y. S. Chen, C. H. Su, J. H. Chen, C. S. Chen, Y. P. Hung, and C. S. Fuh, “[Video-Based Realtime Eye Tracking Technique for Autostereoscopic Displays](http://www.csie.ntu.edu.tw/~fuh/personal/VideoBasedRealtimeEyeTrackingTechnique.pdf),” *Proceedings of Conference on Artificial Intelligence and Applications*, Taipei, Taiwan, pp. 188-193, 2000.

C. Y. Fang, S. W. Chen, and C. S. Fuh, “[Road Sign Detection and Tracking from Complex Background](http://www.csie.ntu.edu.tw/~fuh/personal/RoadSignDetectionandTrackingfromComplex.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taipei, Taiwan, Vol. 1, pp. 88-95, 2000.

C. Y. Fang, C. S. Fuh, and S. W. Chen, “[Road Sign Detection from Complex Backgrounds](http://www.csie.ntu.edu.tw/~fuh/personal/RoadSignDetectionfromComplexBackgrounds.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taipei, Taiwan, pp. 317-324, 1999.

NSC 88-2213-E-003-003

W. W. Hsu, C. C. Hsu, and C. S. Fuh, “A Fully Automatic and General Algorithm for Computing the Cardiothoracic Ratio from X-Ray Images,” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taipei, Taiwan, pp. 102-109, 1999.

F. C. Tseng, C. C. Hsu, and C. S. Fuh, “[Texture Segmentation by Windowed Projection](http://www.csie.ntu.edu.tw/~fuh/personal/TextureSegmentationbyWindowedProjection.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taipei, Taiwan, pp. 827-834, 1999.

C. Y. Fang, C. P. Tung, S. W. Chen, and C. S. Fuh, “Recognition and Reconstruction of Facial Expressions,” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taipei, Taiwan, pp. 181-188, 1998.

NSC 85-2213-E-003-002

C. Y. Fang, C. P. Tung, S. W. Chen, and C. S. Fuh, “[An Assembly of SSO Neural Networks for Character Recognition](http://www.csie.ntu.edu.tw/~fuh/personal/AnAssemblyofSSONeuralNetworksforCharacter.pdf),” *Proceedings of International Symposium on Mulitmedia Information Processing*, Chungli, Taiwan, pp. 300-307, 1998.

NSC 88-2213-E-003-003

M. C. Chang, H. Y. Chen, and C. S. Fuh, “IC Printed Mark Quality Inspection Algorithms,” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taichung, Taiwan, pp. 540-547, 1997.

NSC 85-2212-E-002-077, NSC 86-2212-E-002-025

Y. C. Yang, C. S. Fuh, and L. H. Chen, “Chinese Character Segmentation in Machine Printed Documents,” *Proceedings of Optical Character Recognition and Document Analysis Workshop*, Taipei, Taiwan, pp. 2-20-33, 1997.

NSC 85-2212-E-002-077, NSC 86-2212-E-002-025

D. F. Chang, Y. J. Hsu, and C. S. Fuh, “Handwritten Character Recognition Using a Neural Network,” *Proceedings of Workshop on Optical Character Recognition and Document Analysis*, Chungli, Taiwan, pp. 17-20, 1996.

NSC 84-2212-E-002-046, NSC 85-2212-E-002-077

S. C. Chou and C. S. Fuh, “Computing Liver Volume by Morphing Interpolation,” *Proceedings of Symposium on Computer and Communication Technology*, Taichung, Taiwan, pp. 71-77, 1996.

Y. P. Hung, K. C. Hung, C. S. Chen, and C. S. Fuh, “Multi-Pass Hierarchical Stereo Matching for Generation of Digital Terrain Models from Aerial Images,” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taichung, Taiwan, pp. 227-234, 1996.

B. Y. Huang, Y. P. Hung, and C. S. Fuh, “Corner-Driven Optical Flow Estimation Based on the Rigid-Body Motion Model,” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Taoyuan, Taiwan, pp. 450-456, 1995.

NSC 83-0408-E-001-010, NSC 84-0408-E-001-004

A. T. Tsao, Y. P. Hung, C. S. Fuh, and H. Y. M. Liao, “[On Learning the Threshold Sequence for the Early Jump-Out Template Matching](http://www.csie.ntu.edu.tw/~fuh/personal/OnLearningtheThresholdSequencefortheEarlyJump-OutTemplateMatching.pdf),” *Proceedings of Artificial Intelligence Workshop*, Taipei, Taiwan, pp. 186-192, 1995.

NSC 83-0408-E-001-010, NSC 84-0408-E-001-004

S. L. Kao and C. S. Fuh, “[Shape Information from Shading Using Photometric Methods](http://www.csie.ntu.edu.tw/~fuh/personal/ShapeInformationfromShadingUsingPhtometric.pdf),” *Proceedings of IPPR Conference on Computer Vision, Graphics, and Image Processing*, Nantou, Taiwan, pp. 326-331, 1994.

NSC 83-0422-E-002-010

六、研發成果智慧財產權及其應用績效：

1.請將個人研發成果所產生之智慧財產權及其應用績效分為(1)專利(2)技術移轉(3)著作授權(4)其他等類別，分別填入下列表中。如欄位不足，請自行加印填寫。

2.填寫順序請依專利期間起始日排列，或技術移轉及著作授權之簽約日期排列。

專利 請填入目前仍有效之專利。「類別」請填入代碼：(A)發明專利(B)新型專利(C)新式樣專利。

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 類別 | 專利名稱 | 國別 | 專利號碼 | 發明人 | 專利權人 | 專利期間 | 國科會計畫編號 |
| 發明22 | ＡＩ人工智能機車之控制系統 | 中華民國 | I866282 | 沈裕池  傅楸善  郁霈靖  孫譽  曾琪婷  沈秀華 | 沈裕池  傅楸善  郁霈靖  孫譽  曾琪婷  沈秀華 | 2024/12/11- |  |
| 發明21 | 以即時簡訊機器人實現機器人流程自動化及從影像抽取文字內容的機器人  流程 | 中華民國 | I854101 | 曾柄元  傅楸善  沈立健  熊暉 | 曾柄元  傅楸善  沈立健  熊暉 | 2024/09/01- |  |
| 發明12 | AI Motorcycle | USA | 12,062,244 | Yu-Chih Shen  Yu Sun  Chiou-Shann Fuh  Wen-Zhen Shiu | Yu-Chih Shen  Yu Sun  Chiou-Shann Fuh  Wen-Zhen Shiu | 2024/08/13- |  |
| 發明20 | ＡＩ人工智能機車 | 中華民國 | I849336 | 沈裕池  孫譽  傅楸善  薛文楨 | 沈裕池  孫譽  傅楸善  薛文楨 | 2024/07/21- |  |
| 發明19 | 智能機車電源供應管理裝置 | 中華民國 | I829192 | 沈裕池  孫譽  傅楸善  戴天岳  王鼎元 | 沈裕池  孫譽  傅楸善  戴天岳  王鼎元 | 2024/01/11- |  |
| 發明11 | Systems and Methods of Instant-Messaging Bot for Robotic Process Automation and Robotic Textual-Content Extraction from Images | USA | 11,539,643 | P. Y. Tseng  C. S. Fuh  R. L. C. Shen  H. Hsiung | P. Y. Tseng  C. S. Fuh  R. L. C. Shen  H. Hsiung | 2022/12/27- |  |
| 發明18 | 相機模組的鏡頭髒污偵測方法 | 中華民國 | I779948 | 賴志宏  李建慶  傅楸善 | 賴志宏  李建慶  傅楸善 | 2022/10/01- |  |
| 發明17 | 紙鈔序號辨識方法 | 中華民國 | I549099 | 廖士鋐  傅楸善  盧毅 | 廖士鋐  傅楸善  盧毅 | 2016/09/11-2034/09/22 |  |
| 發明16 | 用於偵測光源頻率的偵測方法 | 中華民國 | I434130 | 陳世明  戴宏碩  黃春福  傅楸善 | 陳世明  戴宏碩  黃春福  傅楸善 | 2014/04/11- |  |
| 發明10 | Device and Method for Obtaining Clear Image | USA | 8,306,360 | Y. C. Lin  C. W. Chen  C. S. Fuh  M. H. Shih | Y. C. Lin  C. W. Chen  C. S. Fuh  M. H. Shih | 2012/11/06- |  |
| 發明15 | 影像校正方法及影像校正積體電路 | 中華民國 | I370411 | 張博思  傅楸善  尤智人士  陳俊宇 | 張博思  傅楸善  尤智人士  陳俊宇 | 2012/08/11-2028/01/15 |  |
| 發明9 | Image Brightness Adjusting Method | USA | 8,107,763 | Y. J. Huang  C. S. Fuh  H. T. Chen | Y. J. Huang  C. S. Fuh  H. T. Chen | 2012/01/31- |  |
| 發明8 | Method and System of Generating High Dynamic Range Image Corresponding to Specific Scene | USA | 8,072,507 | C. S. Fuh  K. Y. Chen  C. N. Hsi  W. L. Chou | C. S. Fuh  K. Y. Chen  C. N. Hsi  W. L. Chou | 2011/12/06- |  |
| 發明14 | 合成清晰影像的裝置及方法 | 中華民國 | I343207 | 林憶群  陳智偉  傅楸善  施明煌 | 林憶群  陳智偉  傅楸善  施明煌 | 2011/06/01- |  |
| 發明7 | Image Processing System Using Motion Vectors and Predetermined Ratio | USA | 7,944,475 | C. S. Fuh  J. P. Chiu  J. F. Chen | C. S. Fuh  J. P. Chiu  J. F. Chen | 2011/05/17- |  |
| 發明13 | 自動對焦方法 | 中華民國 | I333115 | 謝銘和  傅楸善  黃春福  玉鴻基 | 謝銘和  傅楸善  黃春福  玉鴻基 | 2010/11/11- |  |
| 發明6 | White Balance Adjustment Method for a Digital Image Capturing Device | USA | 7,812,862 | P. M. Wang  C. S. Fuh  C. N. Yeh  C. H. Wu  C. F. Lin | P. M. Wang  C. S. Fuh  C. N. Yeh  C. H. Wu  C. F. Lin | 2010/10/12- |  |
| 發明12 | 數位影像擷取裝置之白平衡調整方法 | 中華民國 | I316371 | 王博民  傅楸善  葉俊男  吳金勳  林青楓 | 王博民  傅楸善  葉俊男  吳金勳  林青楓 | 2009/10/21- |  |
| 發明1 | White Balance Method | Europe | EP1793584 | V. Chikane  C. S. Fuh  A. Hsueh | V. Chikane  C. S. Fuh  A. Hsueh | 2009/09/16- |  |
| 發明5 | Method for Producing Enhanced-Resolution Image by Use of a Plurality of Low-Resolution Images | USA | 7,583,860 | Y. C. Kuo  C. Y. Chen  C. S. Fuh  C. Y. Kao | Y. C. Kuo  C. Y. Chen  C. S. Fuh  C. Y. Kao | 2009/09/01- |  |
| 發明4 | Metering Method of Automatic Exposure | USA | 7,565,071 | C. C. Lin  J. H. Lo  C. S. Fuh  Y. S. Jhu | C. C. Lin  J. H. Lo  C. S. Fuh  Y. S. Jhu | 2009/07/21- |  |
| 發明11 | 自動曝光測量方法 | 中華民國 | I311884 | 林錦池  羅瑞祥  傅楸善  朱峻賢 | 林錦池  羅瑞祥  傅楸善  朱峻賢 | 2009/07/01 - |  |
| 發明10 | 數位相機之變焦追蹤方法 | 中華民國 | I310474 | 林錦池  羅瑞祥  傅楸善  張家豪 | 林錦池  羅瑞祥  傅楸善  張家豪 | 2009/06/01 - 2026/03/06 |  |
| 發明3 | Zoom Tracking Method for Digital Camera | USA | 7,526,191 | C. C. Lin  J. H. Lo  C. S. Fuh  C. H. Chang | C. C. Lin  J. H. Lo  C. S. Fuh  C. H. Chang | 2009/04/28- |  |
| 發明2 | White Balance Method | USA | 7,495,696 | V. Chikane  C. S. Fuh  A. Hsueh | V. Chikane  C. S. Fuh  A. Hsueh | 2009/02/24- |  |
| 發明1 | Auto Focus Method for Digital Camera | USA | 7,389,042 | C. C. Lin  J. H. Lo  C. S. Fuh  C. H. Chang | C. C. Lin  J. H. Lo  C. S. Fuh  C. H. Chang | 2008/06/17- |  |
| 發明9 | 數位相機之自動對焦方法 | 中華民國 | I285500 | 林錦池  羅瑞祥  傅楸善  張家豪 | 林錦池  羅瑞祥  傅楸善  張家豪 | 2007/08/11-2025/11/10 |  |
| 發明8 | 白平衡(WHITE BALANCE)方法 | 中華民國 | I281084 | 哈小美  傅楸善  薛雅全 | 哈小美  傅楸善  薛雅全 | 2007/05/11-2025/01/26 |  |
| 發明7 | 攝影一目標物時移動一鏡頭至一最佳鏡頭位置的對焦方法 | 中華民國 | I273304 | 廖偉勝  傅楸善  張谷年  莊仁君 | 廖偉勝  傅楸善  張谷年  莊仁君 | 2007/02/11-2025/11/21 |  |
| 發明6 | 影像處理方法及其裝置 | 中華民國 | I271998 | 傅楸善  邱健平  陳景富 | 傅楸善  邱健平  陳景富 | 2007/01/21-2025/09/20 |  |
| 發明5 | 消除雜訊的方法以及影像色彩內插法 | 中華民國 | I245547 | 陳永祥,傅楸善,  曾怡誠 | 陳永祥,傅楸善,  曾怡誠 | 2005/12/11-2024/04/27 |  |
| 發明4 | 將一高動態範圍影像轉換成一低動態範圍影像的方法與相關裝置 | 中華民國 | I235608 | 傅楸善,  符績耀, 高朝陽 | 傅楸善,  符績耀, 高朝陽 | 2005/07/01-2024/02/12 |  |
| 發明3 | 藉由多張低解析度影像產生高解析度影像之方法 | 中華民國 | 583603 | 郭又銓,  陳建宇, 傅楸善, 高朝陽 | 郭又銓,  陳建宇, 傅楸善, 高朝陽 | 2004/4/11-2023/2/20 |  |
| 發明2 | 彩度校正之方法 | 中華民國 | 190242  560176 | 謝文鴻, 傅楸善, 玉鴻基 | 謝文鴻, 傅楸善, 玉鴻基 | 2003/11/1-2021/12/30 |  |
| 發明1 | 一種應用於數位影像的色彩內插法 | 中華民國 | 188843  548956 | 吳益銘, 傅楸善, 梅普華 | 吳益銘, 傅楸善, 梅普華 | 2003/8/21-2021/12/30 |  |

技術移轉

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 技術名稱 | 專利名稱 | 授權單位 | 被授權單位 | 合約期間 | 國科會計畫編號 |
| 鈔票序號辨認 |  | 台大資工系 | 佳世達 | 2013年9月1日 |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| 產生績效：(可另紙繕寫)。 | | | | | |

著作授權 「類別」分(1)語文著作(2)電腦程式著作(3)視聽著作(4)錄音著作(5)其他，請擇一代碼填入。

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 著作名稱 | 類別 | 著作人 | 著作財產權人 | 被授權人 | 國科會計畫編號 |
| 數位相機之自動白平衡 | 2 | 傅楸善  邱贊生 | 傅楸善  邱贊生 | 友立資訊 | NSC 88-2213-E-002-031 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| 產生績效：(可另紙繕寫)。 | | | | | |

其他協助產業技術發展之具體績效

|  |
| --- |
|  |
|  |

表C303　　　　　　　　　　　　　　　　　　　　　　　　　　　　共 頁 第 頁

七、近三年內執行及申請中之研究計畫：

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 計　畫　名　稱  （本會補助者請註明編號） | 計畫內擔任之工作 | 起迄年月 | 補助或委託機構 | 申請(執行)情形 | 經費總額 |
| 毛孩相機: 寵物行為分析與辨認用嵌入式人工智慧晶片系統  113HT912012 | 主持人 | 113/01/01 起  113/12/31 止 | 工研院 | 進行中 | 990,000 |
| 開發適應於戶外環境道路之深度學習立體視覺景深演算法  NTUS innovation cooperation 11312111006  NTUS innovation cooperation 11312111006 | 主持人 | 113/01/01 起  113/12/31 止 | 臺灣大學系統 | 進行中 | 250,000 |
| 車牌影像復原與偵測委託研究案  28E12A1851 | 主持人 | 112/10/17 起  113/10/16 止 | 中華電信電信研究院 | 完成 | 990,000 |
| Wafer Inspection, Defect Detection & Classification  TUP-20221027-2926 | 主持人 | 112/03/01 起  113/02/29 止 | 台積電 | 完成 | 1,000,000 |
| 傅安全: 深度學習與人工智慧以改善自動與人工駕駛安全 (2,3/3)  NSTC 112-2221-E-002 -189 -MY2 | 主持人 | 112/08/01 起  114/07/31 止 | 科技部 | 進行中 | 1,607,000 |
| 傅安全: 深度學習與人工智慧以改善自動與人工駕駛安全 (1/3)  MOST 111-2221-E-002-174 | 主持人 | 111/08/01 起  112/07/31 止 | 科技部 | 完成 | 685,000 |
| 傅工具: 深度學習與人工智慧以擴展機器視覺瑕疵檢測 (2,3/3)  MOST 109-2221-E-002 -158 -MY2 | 主持人 | 109/08/01 起  111/07/31 止 | 科技部 | 完成 | 1,345,000 |
| 傅工具: 深度學習與人工智慧以擴展機器視覺瑕疵檢測 (1/3)  MOST 108-2221-E-002-140 | 主持人 | 108/08/01 起  109/07/31 止 | 科技部 | 完成 | 622,000 |
| 用X光重建錫球三維空間形狀與瑕疵檢測: 二維重建, 三維重建, 加速計算(3/3)  MOST 106-2221-E-002-220 | 主持人 | 106/08/01 起  107/07/31 止 | 科技部 | 完成 | 622,000 |
| 用X光重建錫球三維空間形狀與瑕疵檢測: 二維重建, 三維重建, 加速計算(1,2/3)  MOST 104-2221-E-002 -133 -MY2 | 主持人 | 104/08/01 起  106/07/31 止 | 科技部 | 完成 | 1,327,000 |
| 數位相機之影像處理: 高動態範圍影像, 行人偵測, 性別與年齡估計 (3/3)  MOST 103-2221-E-002-188 | 主持人 | 103/08/01 起  104/07/31 止 | 科技部 | 完成 | 622,000 |
| 鈔票序號辨認技術 | 主持人 | 102/09/01 起  103/08/31 止 | 佳世達 | 完成 | 1,000,000 |
| 數位相機之影像處理: 高動態範圍影像, 行人偵測, 性別與年齡估計 (2/3)  NSC 102-2221-E-002 -177 | 主持人 | 102/08/01 起  103/07/31 止 | 國科會 | 完成 | 651,000 |
| 數位相機之影像處理: 高動態範圍影像, 行人偵測, 性別與年齡估計 (1/3)  NSC 101-2221-E-002 -194 | 主持人 | 101/08/01 起  102/07/31 止 | 國科會 | 完成 | 675,000 |
| 數位相機之影像處理: 降低雜訊,光線補償, 臉色改善  NSC 98-2221-E-002 -150 -MY3 | 主持人 | 98/08/01 起  101/07/31 止 | 國科會 | 完成 | 1,673,000 |
| 數位相機之影像處理: 色彩內插, 色彩校正光, 色彩管理  NSC 95-2221-E-002-276-MY3 | 主持人 | 95/08/01 起  98/07/31 止 | 國科會 | 完成 | 1,304,000 |
| 行動視訊高畫質顯示調適技術  (95)資網約字第0399號 | 主持人 | 95/01/01 起  95/12/31 止 | 資策會 | 完成 | 948,200 |
| Camera Array for Video Conferencing | 共同主持人 | 94/11/01 起  95/07/31 止 | 廣達電腦 | 完成 | 700,000 |
| 數位相機之影像處理: 自動白平衡, 自動曝光, 自動聚焦 (III)  NSC 94-2213-E-002-032 | 主持人 | 94/08/01 起  95/07/31 止 | 國科會 | 完成 | 511,500 |
| 數位相機之影像處理: 自動白平衡, 自動曝光, 自動聚焦 (II)  NSC 93-2213-E-002-073 | 主持人 | 93/08/01 起  94/07/31 止 | 國科會 | 完成 | 560,600 |
| 數位相機之影像處理: 自動白平衡, 自動曝光, 自動聚焦 (I)  NSC 92-2213-E-002-072 | 主持人 | 92/08/01 起  93/07/31 止 | 國科會 | 完成 | 608,100 |
| 用電腦視覺檢測與分類PLED面板瑕疵  NSC 91-2212-E-002-087 | 主持人 | 91/08/01 起  92/07/31 止 | 國科會 | 完成 |  |
| LCD面板電腦視覺自動瑕疵檢測系統之研發 | 主持人 | 91/01/01 起  91/12/31 止 | 台達電子 | 完成 |  |
| 三度空間多邊形之幾何轉換 | 主持人 | 89/07/01 起  90/06/30 止 | 友立資訊 | 完成 |  |
| 視訊之場景轉換偵測 | 主持人 | 88/07/01 起  89/06/30 止 | 友立資訊 | 完成 |  |
| 表面瑕疵形態分析研究  893K61CE1 | 主持人 | 88/09/01 起  89/12/31 止 | 工研院機械所 | 完成 |  |
| 電子圖書館與博物館中影像處理  NSC 88-2213-E-002-031 | 主持人 | 87/08/01 起  88/07/31 止 | 國科會 | 完成 |  |
| 快速圖形比對演算法研究  883K61CN2 | 主持人 | 87/08/01 起  88/06/30 止 | 工研院機械所 | 完成 |  |
| 高速定位演算法研究  873K67BN3 | 主持人 | 86/08/01 起  87/06/30 止 | 工研院機械所 | 完成 |  |
| 電腦視覺自動量測與檢測系統(III)  NSC 86-2212-E-002-025 | 主持人 | 85/08/01 起  86/07/31 止 | 國科會 | 完成 |  |
| IC印碼品質檢測演算法之研究  863K67BN2 | 主持人 | 85/09/01 起  86/06/30 止 | 工研院機械所 | 完成 |  |
| 影像量測技術之開發與研究 | 主持人 | 85/10/01 起  86/09/30 止 | 鴻海精密 | 完成 | |
| 電腦視覺自動量測與檢測系統(II)  NSC 85-2212-E-002-077 | 主持人 | 84/08/01 起  85/07/31 止 | 國科會 | 完成 | |
| 電腦視覺應用於工業自動化之研究 | 主持人 | 84/01/01 起  85/12/31 止 | 宗倬章基金會 | 完成 | |
| 電腦視覺自動檢測系統  NSC 84-2212-E-002-046 | 主持人 | 83/08/01 起  84/07/31 止 | 國科會 | 完成 | |
| 電腦視覺自動檢測系統  NSC 83-0422-E-002-010 | 主持人 | 83/02/01 起  83/07/31 止 | 國科會 | 完成 | |
| 計算機科技教育改進案 | 主持人 | 82/08/01 起  83/07/31 止 | 教育部 | 完成 | |
| 通訊科技教育改進案 | 主持人 | 82/08/01 起  83/07/31 止 | 教育部 | 完成 | |
| 電腦視覺中找出運動與形狀的類似模型  之研究 NSC 83-0408-E-002-010 | 主持人 | 82/08/01 起  83/07/31 止 | 國科會 | 完成 | |

表C304　　　　　　　　　　　　　　　　　　　　　　　　　　　　共 頁 第 頁