

Ming Ouhyoung (歐陽明)

Contact information

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Education

BS, MS: Electrical Engineering, National Taiwan University, Taipei,
6/1981 and 6/1985
Ph.D: Computer Science, University of North Carolina at Chapel Hill,
1/1990, (dissertation advisor: Frederick. P. Brooks, Jr.)

Experience

Military service, Second Lieutenant in the Army, Taiwan, 7/1981-5/1983
MTS, AT&T Bell Laboratories, Middle-town, NJ, 1/1991-7/1992.
Associate professor, Department of Computer Science and Information
Engineering, National Taiwan University, 8/1991-7/1995
Professor, Department of Computer Science and Information Engineering,
National Taiwan University, 8/1995-7/2020, retired since 8/2020
Director, Center of Excellence for Research in Computer Systems, College
of Engineering, National Taiwan University (8/1998-7/2000)
Chairman, Department of Computer Science and Information Engineering,
National Taiwan University, 8/2000-7/2002
Visiting fellow, Department of Computer Science, Princeton University
(9/2003-12/2003)
Associate Dean, College of Electrical Engineering and Computer Science
(8/2012~2015/7; 8/2005~7/2007)
Adjunct Professor (2020/8~), Department of Computer Science and Information
Engineering

Consultants to Industry

Co-founder, one of four original co-founders, Cyberlink Inc.
(訊連, 1998~)
Board of directors, ASRock (華擎) Inc. (2019/6~)
Consultant: DigiTimes (電子時報) (2018~)
AIM Inc.(采風智匯) (2020/6~)

Research Interests

3D Graphics, Virtual Reality, Augmented Reality, Multimedia,
3D Object Retrieval, Photo-ranking, Facial Animation and Motion Tracking,
Force Feedback Devices/Molecular Binding

Professional activities

Conference Co-chair, IEEE PacificVis2010

Local chair, ACM SIGGRAPH Taipei chapter, 2009~

Program co-chair: Pacific Graphic 2006

General co-chair: ICAT 2000 (International Conference on Artificial
Reality and Telepresence)

Members of program committee: ACM VRST (Virtual Reality Software
and Technology) (2000, 2001, 2002, 2003)

Members of program committee: ICAT (2001-2003)

Members of program committee: Pacific Graphics (1995-2003)

Selected publication

- 1, Yu-Ju Tsai, Yu-Lun Liu, Ming Ouhyoung, Yung-Yu Chuang, "Attention-based View Selection Networks for Light-field Disparity Estimation", Proceedings of AAAI Conference on Artificial Intelligence (AAAI 2020), pp. 1-9, New York, USA, February 2020.
- 2, MY Chen, YB Huang, SP Chang, M Ouhyoung, "Prediction Model for Semitransparent Watercolor Pigment Mixtures Using Deep Learning with a Dataset of Transmittance and Reflectance", arXiv preprint arXiv:1904.00275, 2019
- 3, Hong-Shiang Lin, Chao-Qin Zhang, Xu-You Zhang, Yung-Yu Chuang, Zhong-Li Lin, Ming Ouhyoung, "A Low-Cost Portable Polycamera for Stereoscopic 360° Imaging", IEEE Trans. on Circuit and Systems for Video Technology (IEEE TCSVT), Volume: 29 , Issue: 4 , pp. 915 – 929, April 2019
- 4, Yu-Hsuan Huang, Hao-Yu Chang, Wan-ling Yang, Yu-Kai Chiu, Tzu-Chieh Yu, Pei-Hsuan Tsai, and Ming Ouhyoung, "CatAR: A Novel Stereoscopic Augmented Reality Cataract Surgery Training System with Dexterous Instrument Tracking Technology", CHI 2018, Proc., paper No. 465, (full paper), Montreal, Canada, April 2018.
- 5, Mei-Yun Chen, Ci-Syuan Yang, Ming Ouhyoung, "A Smart Palette: Color Matching of Physical Watercolor Pigments", EuroGraphics 2018, Proceedings., Poster paper, April 2018.
- 6, Che-Hua Yeh, Brian A. Barsky and Ming Ouhyoung, "Personalized Photograph Ranking and Selection System Considering Positive and Negative User Feedback", ACM TOMCCAP (Transactions on Multimedia Computing, Communications and Applications), pp. 1-20, Vol. 10, Issue 4, Article Number 36, June 2014.
- 7, Che-Hua Yeh, Yuan-chen Ho, Brian A. Barsky, Ming Ouhyoung,

- “Personalized Photo Ranking and Selection System”, pp. 211-220, (full paper), Proc. ACM Multimedia 2010, Italy.
- 8, Ken-Yi Lee, Yung-Yu Chuang, Bing-yu Chen, Ming Ouhyoung, “Video Stabilization using Robust Feature Trajectories”, Proceedings of IEEE Conference on Computer Vision (ICCV 2009), pp. 1397-1404, September, Kyoto, Japan.
- 9, Wan-Chun Ma, Andrew Jones, Jen-Yuan Chiang, Tim Hawkins, Sune Frederiksen, Pieter Peers, Marko Vukovicz, Ming Ouhyoung, Paul Debevec, “Facial Performance Synthesis using Deformation-Driven Polynomial Displacement Maps”, ACM Transaction on Graphics, Vol. 27, No.5, Vol. 27, pp. 121:1-10, (Proceedings of SIGGRAPH ASIA 2008), Dec. 2008.
- 10, Fu-Che Wu, Wan-Chun Ma, Rung-Huei Liang, Bing-Yu Chen, Ming Ouhyoung, "Domain Connected Graph: the Skeleton of a Closed 3D Shape for Animation", Vol. 22, No. 2, pp. 117-135, The Visual Computer, 2006
- 11, Jeng-Sheng Yeh, Ding-Yun Chen, Bing-Yu Chen and Ming Ouhyoung, "A Web-based Three-dimensional Protein Retrieval System by Matching Visual Similarity", Bioinformatics, Vol. 31, No. 13, pp. 3056-3057, 2005
- 12, Ding-Yun Chen, Ming Ouhyoung, Xiao-Pei Tian, Yu-Te Shen, "On Visual Similarity Based 3D Model Retrieval", Computer Graphics Forum 2003, pp. 223 - 232, (also in EuroGraphics2003, Spain).
- 13, I-Chen Lin, Jeng-sheng Yeh, Ming Ouhyoung, "Extracting 3D facial animation parameters from multiview video clips", pp. 72-80, IEEE Computer Graphics and Applications, Vol. 22, No. 6 , Nov., 2002.
- 14, Jiann-Rong Wu and Ming Ouhyoung, "On Latency Compensation and Its Effects for Head Motion Trajectories in Virtual Environments", pp. 79-90, Vol. 16, No. 2, The Visual Computer, 2000.
- 15, Ming Ouhyoung, Yung-huei Yan, "A Three Dimensional Building Authoring Tool Based on Line-Drawing Understanding", Presence: Teleoperator and Virtual Environment, pp. 1-12, Vol. 5, No. 1, 1996, MIT Press.
- 16, Jiann-Rong Wu and Ming Ouhyoung, "A 3D Tracking Experiment on Latency and Its Compensation Methods in Virtual Environments", Proc. of ACM UIST'95 (ACM User Interface and Software Technology 1995), pp. 41-49, ACM Press Pittsburgh, USA.
- 17, Ming Ouhyoung, Wu-Nan Tsai, Ming-Chang Tsai, Jiann-Rong Wu,

Chung-Hsi Huang, and Tzong-Jer Yang, "A Low-Cost Force Feedback Joystick and Its Use in PC Video Games," IEEE Transactions on Consumer Electronics, Vol. 41, No. 3, pp. 787-794, Aug. 1995.

18, Frederick P. Brooks, Jr., Ming Ouh-young, James J. Batter, P. Jerome Kilpatric, "Project Grope-- Haptic Displays for Scientific Visualization", Computer Graphics (ACM), Vol. 24, No.4, pp.177-185 (also in ACM SIGGRAPH90).

19, Margaret Minsky, Ming Ouh-young, Oliver Steele, Frederick P. Brooks, Jr., Max Behensky, " Feeling and Seeing: Issues in Force Display", Computer Graphics (ACM), Vol.24, No.2, pp236-244.

20, Lin-shan Lee, Chiu-Yu Tseng, Ming Ouh-young, "The Synthesis Rules in a Chinese Text-to-Speech System", IEEE Trans. on Accoustics, Speech and Signal Processing, pp.1309-1320, Vol. 37, No. 9, 1989.