

Shou-De Lin

- Chief Machine Learning Scientist, Appier
- Email: sd.lin@appier.com
- Website: <http://www.csie.ntu.edu.tw/~sdlin/>
- Google Scholar profile link:
https://scholar.google.com/citations?user=_82xf3QAAAAJ&hl=en

RESEARCH INTERESTS:

- AI, Machine Learning, Knowledge Discovery and Data Mining, Natural Language Processing

EDUCATION:

- 2002 – 2006 Ph.D. in Computer Science, University of Southern California
- 2004 – 2006 M.S. in Computational Linguistics, University of Southern California
- 1999 – 2001 M.S. in Electrical Engineering, University of Michigan, Ann Arbor
- 1992 – 1996 B.S. in Electrical Engineering, National Taiwan University

AWARDS

- Google Research Award (2008)
- Microsoft Research Grant Award (2008, 2015, 2016, 2019)
- Leading or co-Leading the NTU team to win ACM KDD Cup Champion 6 times (2008~2013)
- ASONAM Best Paper Award (2011)
- 5-time US Airforce AOARD Grant Award (2011~2016)
- The Young Scholars' Creativity Award, Foundation For The Advancement of Outstanding Scholarship (2014)
- Ta-You Wu Memorial Award (2015)
- Leading NTU team to win WSDM Cup Champion 2016
- Co-Found a company OmniEyes to win CES Innovation Award (2019)
- IoT Innovative Application Award from Pan Wen Yuan Foundation (2019)
- Y. Z. Hsu Scientific Paper Award in the field of AI (2021)

EXPERIENCES

- 2020-now Chief Machine Learning Scientist in Appier
- 2019-now co-Founder and advisor for OmniEyes
- 2015-2020 Professor in CSIE department, National Taiwan University
- 2015-2016 Visiting Scholar in Microsoft Research
- 2011-2015 Associate Professor in CSIE department, National Taiwan University
- 2007-2011 Assistant Professor in CSIE department, National Taiwan University
- 2005-2007 Research Assistant & Postdoc Researcher in Los Alamos National Lab

TUTORIAL AND PANEL SPEAKER

- Lecturer in Machine Learning Summer School 2021

- Keynote Speaker for BESC 2018
- Keynote speaker for AIT 2018
- KDD Cup 2015 Panel
- “Sampling and Summarization for Social Networks” PAKDD 2013, SDM 2013
- “Panel on Big Data Forum” Academic Sinica, 2013
- “Big Data and Social Computing” TAAI 2013
- “Practical Issues for Machine Learning and Data Mining” NCTU BIG Data school 2012
- “Panel on Big Data Management and Analysis” NTU-INTEL joint workshop, 2012
- “Mining Heterogeneous Social Network”, Tutorial in PAKDD 2009

MAJOR SERVICES

- 2021-now Deputy Director of NTU AI Center
- 2020~now Associated Editor for Frontier in Big Data
- 2012~now Associated Editor for Journal of Information Science and Engineering
- 2012~now Associated Editor for International Journal of Computational Linguistics and Chinese Language Processing
- 2015~now Associated Editor International Journal of Web Intelligence
- 2018 WSDM Cup co-Chair 2018
- 2017-2019 Founding Director of MOE AI Talent Incubation Office
- 2017 General co-Chair of TAAI 2017
- 2016-2020 Sub-section Director of computing center in NTU
- 2016 KDD Cup co-Chair for KDD 2016
- 2015 PC co-Chair for ASE SocialInformations 2015
- 2015 Area co-Chair for ACL 2015
- 2015 Publication co-Chair for ACM SIGKDD
- 2014 Senior TPC in ACM SIGKDD
- 2013-2014 AFNLP SIG SocialNLP Founder and President
- 2013 PC co-Chair for Technology and Application for AI conference 2013
- 2012 Video/Demo Co-Chairs for ACM SIGKDD
- 2011~2018 Associated Editor for Social Network Analysis and Mining Journal
- 2009-2011 Secretary General for TAAI

Courses Offered

- Probability
- Probabilistic Graphical Model
- Data Mining and Machine Learning: Theory and Practice
- Social Network Analysis
- Technical Writing and Research Methods
- Statistic Methods for Intelligent Information Processing (SAI)
- Machine Discovery

Publications

Journals

- J1: Chih-Te Lai, Cheng-Te Li, Shou-De Lin:Deep Energy Factorization Model for Demographic Prediction. ACM Trans. Intell. Syst. Technol. 12(1): 8:1-8:16 (2021)
- J2: Shu-Kai Zhang, Cheng-Te Li, Shou-De Lin:A joint optimization framework for better community detection based on link prediction in social networks. Knowl. Inf. Syst. 62(11): 4277-4296 (2020)
- J3: Wen-Hao Chen, Chin-Chi Hsu, Yi-An Lai, Vincent Liu, Mi-Yen Yeh, Shou-De Lin:Attribute-Aware Recommender System Based on Collaborative Filtering: Survey and Classification. Frontiers Big Data 2: 49 (2019)
- J4: Jia-Yun Jiang, Cheng-Te Li, Shou-De Lin:Towards a more reliable privacy-preserving recommender system. Inf. Sci. 482: 248-265 (2019)
- J5: Chin-Chi Hsu, Yi-An Lai, Mi-Yen Yeh, Shou-De Lin, DeepRank: Improving Unsupervised Node Ranking via Link Discovery, in Data Mining and Knowledge Discovery, 2019
- J6: Chin-chi Hsu, Mi-Yen Yeh and Shou-De Lin, "A General Framework for Implicit and Explicit Social Recommendation," in IEEE Transactions on Knowledge & Data Engineering 2018
- J7: Cheng-Te Li and Shou-De Lin. Social Flocks: Simulating Crowds to Discover the Connection between Spatial-Temporal Movements of People and Social Structure. IEEE Transactions on Computational Social Systems (TCSS), 2017.
- J8: Cheng-Te Li, Man-Kwan Shan, and Shou-De Lin. "On Team Formation with Expertise Query in Collaborative Social Networks." Knowledge and Information Systems Journal. 2015 Volume 42, Issue 2, Pages: 441-463
- J9: Chun-Liang Li, Yu-Chuan Su, Ting-Wei Lin, Cheng-Hao Tsai, Wei-Cheng Chang, Kuan-Hao Huang, Tzu-Ming Kuo, Shan-Wei Lin, Young-San Lin, Yu-Chen Lu, Chun-Pai Yang, Cheng-Xia Chang, Wei-Sheng Chin, Yu-Chin Juan, Hsiao-Yu Tung, Jui-Pin Wang, Cheng-Kuang Wei, Felix Wu, Tu-Chun Yin, Tong Yu, Yong Zhuang, Shou-de Lin, Hsuan-Tien Lin, Chih-Jen Lin. "Combination of Feature Engineering and Ranking Models for Paper-Author Identification in KDD Cup 2013" Accepted by Journal of Machine Learning Research, 2015
- J10: Hsun-Ping Hsieh, Cheng-Te Li, and Shou-De Lin. "Measuring and Recommending Time-Sensitive Routes from Location-based Data." ACM Transactions on Intelligent Systems and Technology. Vol.5, No.3, Article 45, Pages: 45-1~45-27. June. 2014.
- J11: Wei-Sheng Chin, Yong Zhuang, Yu-Chin Juan, Felix Wu, Hsiao-Yu Tung, Tong Yu, Jui-Pin Wang, Cheng-Xia Chang, Chun-Pai Yang, Wei-Cheng Chang, Kuan-Hao Huang, Tzu-Ming Kuo, Shan-Wei Lin, Young-San Lin, Yu-Chen Lu, Yu-Chuan Su, Cheng-Kuang Wei, Tu-Chun Yin, Chun-Liang Li, Ting-Wei Lin, Cheng-Hao Tsai, Shou-De Lin, Hsuan-Tien Lin, Chih-Jen Lin. "Effective string processing and matching for author disambiguation." Journal of Machine Learning Research 15. Issue 1, Pages: 3037-3064. October. 2014
- J12: Hung-Yi Lo, Shou-De Lin, and Hsin-Min Wang. "Generalized k-Labelsets Ensemble for Multi-Label and Cost-Sensitive Classification." IEEE Transactions on Knowledge and Data Engineering. Vol. 26, No. 7, 2014. Pages: 1679 - 1691.
- J13: Jing-Kai Lou, Fu-Min Wang, Chin-Hua Tsai, San-Chuan Hung, Perng-Hwa Kung, Shou-De Lin, Kuan-Ta Chen, and Chin-Laung Lei. "A Social Diffusion Model with an Application on Election Simulation" The Scientific World Journal. vol. 2014, Article ID 180590, 14 pages, 2014. doi:10.1155/2014/180590.
- J14: Cheng-Te Li, Hsun-Ping Hsieh, Tsung-Ting Kuo, Shou-De Lin. "Opinion Diffusion and Analysis on Social Networks." Encyclopedia of Social Network Analysis and Mining 2014. Pages: 1212-1218. 2014.
- J15: Yu-Chih Chen, Yu-Shi Lin, Yu-Chun Shen, Shou-De Lin. "A Modified Random Walk Framework for Handling Negative Ratings and Generating Explanations." ACM Transactions on Intelligent Systems and Technology. Volume 4 No. 1, January 2013. Article No. 12, pages:12-1~12-21. 2013.
- J16: Yi-Chen Lo, Jhao-Yin Li, Mi-Yen Yeh, Shou-De Lin, Jian Pei. "What Distinguish One from Its Peers in Social Networks?" Data Mining and Knowledge Discovery. November 2013, Volume 27, Issue 3, Pages: 396-420. 2013.

- J17: Yi-Chen Lo, Hung-Che Lai, Cheng-Te Li, and Shou-De Lin. "Mining and Generating Large-Scaled Social Networks via MapReduce." *Social Network Analysis and Mining*. December 2013, Volume 3, Issue 4, Pages: 1449-1469. 2013.
- J18: Cheng-Te Li, Tsung-Ting Kuo, Chien-Tung Ho, San-Chuan Hong, Wei-Shih Lin, and Shou-De Lin. "Modeling and Evaluating Information Propagation in a Microblogging Social Network." *Social Network Analysis and Mining*. Volume 3, Issue 3, Pages: 341-357. 2013.
- J19: Wan-Chen Lin, Tsung-Ting Kuo, Tung-Jia Chang, Chueh-An Yen, Chao-Ju Chen and Shou-de Lin. "Exploiting Machine Learning Models for Chinese Legal Documents Labeling, Case Classification, and Sentencing Prediction." *International Journal of Computational Linguistics & Chinese Language Processing*, Volume 17, Number 4, pages:49-68, December 2012.
- J20: Yi-Kuang Ko, Jing-Kai Lou, Cheng-Te Li, Shou-de Lin, and Shyh-Kang Jeng. "A Social Network Evolution Model Based on Seniority." *Social Network Analysis and Mining Journal*. June 2012, Volume 2, Issue 2, Pages: 107-119. Online date: 2011/8.
- J21: Hung-Yi Lo, Ju-Chiang Wang, Hsin-Min Wang, and Shou-De Lin. "Cost-sensitive Multi-label Learning for Audio Tag Annotation and Retrieval", *IEEE Transaction on Multimedia*, 18(3), pp. 518-529, June 2011.
- J22: Tsung-Ting Kuo, and Shou-De Lin. "Learning-Based Concept-Hierarchy Refinement through Exploiting Topology, Content and Social Information", *Information Sciences*, 2011.
- J23: Anta Huang, Tsung-Ting Kuo, Ying-Chun Lai, Shou-De Lin. "Discovering Correction Rules for Auto Editing", *IJCLCLP*, 2010.
- J24: Shou-de Lin and Hans Chalupsky. "Discovering and Explaining Abnormal Nodes in Semantic Graphs." *IEEE Transactions on Knowledge and Data Engineering TKDE*, Vol.20, No.8, 2008.
- J25: Hung-Yi Lo, Chun-Min Chang, Tsung-Hsien Chiang, Cho-Yi Hsiao, Anta Huang, Tsung-Ting Kuo, Wei-Chi Lai, Ming-Han Yang, Jung-Jung Yeh, Chun-Chao Yen, Shou-De Lin, "Learning to Improve Area-Under-FROC for Imbalanced Medical Data Classification Using an Ensemble Method" invited paper for *ACM SIGKDD Explorations Vol10, Issue 2*, 2008.
- J26: Shou-de Lin and Kevin Knight. "Discovering the linear writing order of a two-dimensional ancient hieroglyphic script", in *Artificial Intelligence v.170/4-5*, Elsevier, 2006. One of the Top 25 hottest papers in *Artificial Intelligence in 2006*.
- J27: Shou-de Lin and Craig Knoblock. "SERGEANT: A Framework for Building More Flexible Web Agents by Exploiting a Search Engine", in *Journal of Web Intelligence and Agent Systems*, v3(1), 2005.
- J28: Shou-de Lin and Hans Chalupsky. "Using Unsupervised Link Discovery Methods to Find Interesting Facts and Connections in a Bibliography Dataset", selected to be the 2nd place for the open task in *ACM KDDCup 2003*, in *KDD Explorations V5 Issue 2*.
- J29: Michael P. Wellman, Peter R. Wurman, Kevin O'Malley, Roshan Bangera, Shou-de Lin, Daniel Reeves, and William E. Walsh. "Designing the Market Game for a Trading Agent Competition". *IEEE Internet Computing*, 2001.

Conferences

- C1: Chih-Chun Yang, Cheng-Te Li, Shou-De Lin:SMITH: A Self-supervised Downstream-Aware Framework for Missing Testing Data Handling. *PAKDD (2) 2022*: 499-510
- C2: Yun-Da Tsai, Cheng-Kuan Chen, Shou-De Lin:Toward an Effective Black-Box Adversarial Attack on Functional JavaScript Malware against Commercial Anti-Virus. *CIKM 2021*: 4165-4172
- C3: Hong-You Chen, Sz-Han Yu, Shou-de Lin:Glyph2Vec: Learning Chinese Out-of-Vocabulary Word Embedding from Glyphs. *ACL 2020*

- C4: Chin-Hui Chen, Yi-Fu Fu, Hsiao-Hua Cheng, Shou-De Lin:Unseen Filler Generalization In Attention-based Natural Language Reasoning Models. CogMI 2020: 42-51
- C5: Keng-Te Liao, Zhihong Shen, Chiyuan Huang, Chieh-Han Wu, Po-Chun Chen, Kuansan Wang, Shou-de Lin:Explainable and Sparse Representations of Academic Articles for Knowledge Exploration. COLING 2020: 6207-6216
- C6: Yu-Sheng Chou, Chien-Yao Wang, Shou-De Lin, Hong-Yuan Mark Liao:How Incompletely Segmented Information Affects Multi-Object Tracking and Segmentation (MOTS). IICIP 2020: 2086-2090
- C7: Keng-Te Liao, Cheng-Syuan Lee, Zhong-Yu Huang, Shou-de Lin:Explaining Word Embeddings via Disentangled Representation. ACL/IJCNLP 2020: 720-725
- C8: Jun-Kun Wang, Chi-Jen Lu, Shou-De Lin:Online Linear Optimization with Sparsity Constraints. ALT 2019: 882-896
- C9: Fan-Yun Sun, Yen-Yu Chang, Yueh-Hua Wu, Shou-De Lin:A Regulation Enforcement Solution for Multi-agent Reinforcement Learning. AAMAS 2019: 2201-2203
- C10: Yu-Sheng Chou, Chien-Yao Wang, Ming-Chiao Chen, Shou-De Lin, Hong-Yuan Mark Liao:Dynamic Gallery for Real-Time Multi-Target Multi-Camera Tracking. AVSS 2019: 1-8
- C11: Sakura Yamaki, Shou-de Lin, Wataru Kameyama:Detection of Anomaly State Caused by Unexpected Accident using Data of Smart Card for Public Transportation. IEEE BigData 2019: 1693-1698
- C12: Yue Liu, Helena Lee, Palakorn Achananuparp, Ee-Peng Lim, Tzu-Ling Cheng, Shou-De Lin:Characterizing and Predicting Repeat Food Consumption Behavior for Just-in-Time Interventions. PDH 2019: 11-20
- C13: Liang-Hsin Shen, Pei-Lun Tai, Chao-Chung Wu, Shou-De Lin:Controlling Sequence-to-Sequence Models - A Demonstration on Neural-based Acrostic Generator. EMNLP/IJCNLP (3) 2019: 43-48
- C14: Chih-Te Lai, Yi-Te Hong, Hong-You Chen, Chi-Jen Lu, Shou-De Lin:Multiple Text Style Transfer by using Word-level Conditional Generative Adversarial Network with Two-Phase Training. EMNLP/IJCNLP (1) 2019: 3577-3582
- C15: Szu-Wei Fu, Chien-Feng Liao, Yu Tsao, Shou-De Lin:MetricGAN: Generative Adversarial Networks based Black-box Metric Scores Optimization for Speech Enhancement. ICML 2019: 2031-2041
- C16: Hong-You Chen, Chin-Hua Hu, Leila Wehbe, Shou-De Lin:Self-Discriminative Learning for Unsupervised Document Embedding. NAACL-HLT (1) 2019: 2465-2474
- C17: Chao-Chung Wu, Ruihua Song, Tetsuya Sakai, Wen-Feng Cheng, Xing Xie, Shou-De Lin:
Evaluating Image-Inspired Poetry Generation. NLPCC (1) 2019: 539-551
- C18: Kung-Hsiang Huang, Yi-Fu Fu, Yi-Ting Lee, Tzong-Hann Lee, Yao-Chun Chan, Yi-Hui Lee, Shou-De Lin:A-HA: a hybrid approach for hotel recommendation. RecSys Challenge 2019: 4:1-4:5
- C19: Ming-Han Feng, Chin-Chi Hsu, Cheng-Te Li, Mi-Yen Yeh, Shou-De Lin:MARINE: Multi-relational Network Embeddings with Relational Proximity and Node Attributes. WWW 2019: 470-479
- C20: Ian En-Hsu Yen · Wei-Cheng Lee · Kai Zhong · Sung-En Chang · Pradeep Ravikumar · Shou-De Lin
"MixLasso: Generalized Mixed Regression via Convex Atomic-Norm Regularization" NIPS2018
- C21: Hong-You Chen, Cheng-Syuan Lee, Keng-Te Liao and Shou-de Lin, Word Relation Autoencoder for Unseen Hypernym Extraction Using Word Embeddings, EMNLP 2018

- C22: Yian Chen, Xing Xie, Shou-De Lin, Arden Chiu: WSDM Cup 2018: "Music Recommendation and Churn Prediction." WSDM 2018:
- C23: Yu-Sheng Chou, Pai-Heng Hsiao, Shou-De Lin, Hong-Yuan Mark Liao "How Sampling Rate Affects Cross-Domain Transfer Learning for Video Description". ICASSP 2018
- C24: Yueh-Hua Wu, Shou-De Lin: A Low-Cost Ethics Shaping Approach for Designing Reinforcement Learning Agents. AAAI 2018
- C25: FY Sun, YY Chang, YH Wu, SD Lin, Designing Non-greedy Reinforcement Learning Agents with Diminishing Reward Shaping in AIES2018
- C26: Yi-An Lai · Chin-Chi Hsu · Wen Hao Chen · Mi-Yen Yeh · Shou-De Lin "Preserving Proximity and Global Ranking for Node Embedding" in NIPS 2017
- C27: Chin-Chi Hsu, Yi-An Lai, Wen-Hao Chen, Ming-Han Feng, Shou-De Lin "Unsupervised Ranking using Graph Structures and Node Attributes" WSDM 2017
- C28: Jun-Kun Wang, Shou-De Lin "Parallel Least-Squares Policy Iteration", DSAA 2016
- C29: Jun-Kun Wang, Shou-De Lin "Efficient Sampling-based ADMM for Distributed Data", DSAA 2016
- C30: Chia-Hsin Ting, Hung-Yi Lo, Shou-De Lin "Transfer-Learning Based Model for Reciprocal Recommendation" PAKDD 2016
- C31: Yu-Yang Huang and Shou-De Lin "Transferring User Interests Across Websites with Unstructured Text for Cold-Start Recommendation", EMNLP 2016
- C32: Ming-Han Feng, Kuan-Hou Chan, Huan-Yuan Chen, Ming-Feng Tsai, Mi-Yen Yeh, and Shou-De Lin. "An Efficient Solution to Reinforce Paper Ranking using Author/Venue/Citation Information – The Winner's Solution for WSDM Cup 2016" in WSDM Cup Workshop, WSDM2016
- C33: Ian E.H.Yen, Shan-Wei Lin, Shou-De Lin. "A Dual-Augmented Block Minimization Framework for Learning with Limited Memory." In Advances in Neural Information Processing Systems (NIPS), 2015.
- C34: Guang-He Lee, Shou-De Lin, "LambdaMF: Learning Nonsmooth Ranking Functions in Matrix Factorization Using Lambda" In IEEE International Conference on Data Mining (ICDM) 2015
- C35: Yen-Kai Wang, Wei-Ming Chen, Cheng-Te Li, and Shou-De Lin. "Identifying Smallest Unique Subgraphs in a Heterogeneous Social Network." IEEE International Conference on Big Data 2015.
- C36: Chung-Yi Li, Wei-Lun Su, Todd G. McKenzie, Fu-Chun Hsu, Shou-De Lin, Phillip B. Gibbons, and Jane Yung-jen Hsu." Recommending Missing Sensor Values." IEEE International Conference on Big Data 2015.
- C37: Chin-Chi Hsu, Perng-Hwa Kung, Mi-Yen Yeh, Shou-De Lin, and Phillip B. Gibbons. "Bandwidth-Efficient Distributed k-Nearest-Neighbor Search with Dynamic Time Warping." IEEE International Conference on Big Data 2015.
- C38: Han Xiao, Shou-De Lin, Mi-Yen Yeh, Phillip Gibbons, and Claudia Eckert, "Learning Better while Sending Less: Communication-Efficient Online Semi-Supervised Learning in Client-Server Settings," the 2015 IEEE International Conference on Data Science and Advanced Analytics (IEEE DSAA'2015), October 2015.
- C39: Hsun-Ping Hsieh, Shou-De Lin and Yu Zheng. "Inferring Air Quality for Station Location Recommendation Based on Urban Big Data." ACM SIGKDD 2015.
- C40: Su-Chene Lin, Shou-De Lin, and Ming-Syan Chen "A Learning-based Framework to handle Multi-round Multi-party influence maximization on social networks" ACM SIGKDD 2015.

- C41: Hsun-Ping Hsieh, Cheng-Te Li and Shou-De Lin. "Estimating Potential Customers Anywhere and Anytime on Location-based Social Networks." ECML/PKDD 2015.
- C42: En-Hsu Yen, Ting-Wei Lin, Shou-De Lin, Pradeep Ravikumar and Inderjit Dhillon. "Sparse Random Feature Algorithm as Coordinate Descent in Hilbert Space." NIPS 2014.
- C43: Chung-Yi Li and Shou-De Lin. "Matching Users and Items across Domains to Improve the Recommendation Quality." Proceedings of the 20th ACM SIGKDD international conference on Knowledge discovery and data mining. Pages: 801-810. August. 2014.
- C44: Jun-Kun Wang and Shou-De Lin. "Robust Inverse Covariance Estimation under Noisy Measurements." Proceedings of the 31st International Conference on Machine Learning (ICML-14). JMLR : W&CP Volume32. Pages: 928-936. June. 2014.
- C45: Ian En-Hsu Yen, Ting-Wei Lin, Shou-De Lin, Pradeep Ravikumar and Inderjit S. Dhillon. "Sparse Random Features Algorithm as Coordinate Descent in Hilbert Space." Advances in Neural Information Processing Systems. Pages: 2456-2464. December. 2014.
- C46: How Jing and Shou-De Lin. "Neural Conditional Energy Models for Multi-Label Classification." 2014 IEEE International Conference on Data Mining (ICDM), Pages: 240-249, December. 2014
- C47: How Jing, An-Chun Liang, Shou-De Lin and Yu Tsao. "A Transfer Probabilistic Collective Factorization Model to Handle Sparse Data in Collaborative Filtering." 2014 IEEE International Conference on Data Mining (ICDM), Pages: 250-259, December. 2014.
- C48: Yu-Yang Huang, Rui Yan, Tsung-Ting Kuo and Shou-De Lin. "Enriching Cold Start Personalized Language Model Using Social Network Information." Proceedings of the 52nd Annual Meeting of the Association for Computational Linguistics. Pages: 611-617. June. 2014.
- C49: Jui-Pin Wang, Yu-Chen Lu, Mi-Yen Yeh, Shou-De Lin, and Phillip B. Gibbons. "Communication-Efficient Distributed Multiple Reference Pattern Matching for M2M Systems." 2013 IEEE International Conference on Data Mining (ICDM), Pages: 787-796, December. 2013.
- C50: Cheng-Lun Yang, Perng-Hwa Kung, Cheng-Te Li, Chun-An Chen, and Shou-De Lin. "Sampling Heterogeneous Networks." 2013 IEEE International Conference on Data Mining (ICDM), Pages: 1247-1252, December. 2013.
- C51: Ian E.H. Yen, Chun-Fu Chang, Ting-Wei Lin, Shan-Wei Lin, Shou-De Lin. "Indexed Block Coordinate Descent for Large-Scale Linear Classification with Limited Memory." Proceedings of the 19th ACM SIGKDD international conference on Knowledge discovery and data mining. Pages: 248-256. August, 2013.
- C52: Tsung-Ting Kuo, Rui Yan, Yu-Yang Huang, Perng-Hwa Kung, Shou-De Lin. "Unsupervised Link Prediction Using Aggregative Statistics on Heterogeneous Social Networks." Proceedings of the 19th ACM SIGKDD international conference on Knowledge discovery and data mining. Pages: 775-783. August, 2013.
- C53: Jing-Kai Lou, Fu-Min Wang, Chin-Hua Tsai, San-Chuan Hung, Perng-Hwa Kung, and Shou-De Lin. "Modeling the Diffusion of Preferences on Social Networks." Proceedings of the 2013 SIAM International Conference on Data Mining. Pages:605-613. May, 2013.
- C54: Rui Yan, Han Jiang, Mirella Lapata, Shou-De Lin, Xueqiang Lv, Xiaoming Li. "i, Poet: Automatic Chinese Poetry Composition through a Generative Summarization Framework under Constrained Optimization." Proceedings of the Twenty-Third international joint conference on Artificial Intelligence. Pages: 2197- 2203. August. 2013.
- C55: Chin-Hua Tsai, Jing-Kai Lou, Wan-Chen Lu, and Shou-De Lin. "Exploiting Rank-Learning Models to Predict the Diffusion of Preferences on Social Networks." IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), 2014, Pages: 265-272, 17-20 August. 2014.

- C56: Wei-Shih Lin, Tsung-Ting Kuo, Yu-Yang Huang, Wan-Chen Lu and Shou-De Lin. "A Transfer-Learning Approach to Exploit Noisy Information for Classification and Its Application on Sentiment Detection." *Technologies and Applications of Artificial Intelligence*. Volume 8916, 2014, Pages: 262-273. November. 2014.
- C57: Yu-Yang Huang, Yu-An Yen, Ting-Wei Ku, Shou-De Lin, Wen-Tai Hsieh and Tsun Ku. "A Weight-Sharing Gaussian Process Model Using Web-Based Information for Audience Rating Prediction." *Technologies and Applications of Artificial Intelligence*. Volume 8916, 2014, Pages: 198-208. November. 2014.
- C58: Chia-Jen Lin, Tsung-Ting Kuo, and Shou-De Lin. "A Content-based Matrix Factorization Model for Recipe Recommendation." *PAKDD 2014, Part II, LNAI 8444*, Pages: 560–571, 2014. May. 2014.
- C59: Cho-Yi Hsiao, Hung-Yi Lo, Tu-Chun Yin, and Shou-De Lin. "Optimizing Specificity under Perfect Sensitivity for Medical Data Classification." *2014 International Conference on Data Science and Advanced Analytics (DSAA)*. Pages: 163-169 November. 2014.
- C60: Jung-Jung Yeh, Tsung-Ting Kuo, William Chen, and Shou-De Lin. "Minimizing Expected Loss for Risk-Avoiding Reinforcement Learning." *2014 International Conference on Data Science and Advanced Analytics (DSAA)*. Pages: 11-17 November. 2014.
- C61: Shun-Hsing Ou, Yu-Chen Lu, Jui-Pin Wang, Shao-Yi Chien, Shou-De Lin, Mi-Yen Yeh, Chia-Han Lee, Phillip Gibbons, V. Srinivasa Somayazulu and Yen-Kuang Chen. "Communication-Efficient Multi-view Keyframe Extraction in Distributed Video Sensors." *2014 IEEE Visual Communications and Image Processing Conference*. Pages: 13-16. December. 2014.
- C62: Cheng-Lun Yang, Perng-Hwa Kung, Chun-An Chen, Shou-De Lin. "Semantically Sampling in Heterogeneous Social Networks." *Proceedings of the 22nd international conference on World Wide Web companion*. Pages: 181-182. May, 2013.
- C63: Yu-Chun Shen, Tsung-Ting Kuo, I-Ning Yeh, Tzu-Ting Chen, Shou-De Lin. "Exploiting Temporal Information in a Two-stage Classification Framework for Content-based Depression Detection." *Advances in Knowledge Discovery and Data Mining. Lecture Notes in Computer Science Volume 7818*, 2013, Pages: 276-288. May. 2013.
- C64: Jung-Wei Chou, Min-Huang Chu, Yi-Lin Tsai, Yun Jin, Chen-Mou Cheng, Shou-De Lin. "An Unsupervised Learning Model to Perform Side Channel Attack" *Advances in Knowledge Discovery and Data Mining. Lecture Notes in Computer Science Volume 7818*, 2013, Pages: 414-425. May, 2013.
- C65: Chun-Liang Li, Yu-Chuan Su, Ting-Wei Lin, Cheng-Hao Tsai, Wei-Cheng Chang, Kuan-Hao Huang, Tzu-Ming Kuo, Shan-Wei Lin, Young-San Lin, Yu-Chen Lu, Chun-Pai Yang, Cheng-Xia Chang, Wei-Sheng Chin, Yu-Chin Juan, Hsiao-Yu Tung, Jui-Pin Wang, Cheng-Kuang Wei, Felix Wu, Tu-Chun Yin, Tong Yu, Yong Zhuang, Shou-de Lin, Hsuan-Tien Lin, Chih-Jen Lin. "Combination of Feature Engineering and Ranking Models for Paper-Author Identification in KDD Cup 2013." *Proceedings of the 2013 KDD Cup 2013 Workshop Article No. 2*. August, 2013.
- C66: Hsun-Ping Hsieh, Cheng-Te Li, Shou-De Lin. "Time-Sensitive Route Planning Using Location-Based Data." *2013 IEEE 13th International Conference on Data Mining Workshops (ICDMW)*. Pages: 1121-1128. Dec. 2013.
- C67: Rui Yan, Han Jiang, Mirella Lapata, Shou-De Lin, Xueqiang Lv, Xiaoming Li. "Semantic v.s. Positions: Utilizing Balanced Proximity in Language Model Smoothing for Information Retrieval." *International Joint Conference on Natural Language Processing*, pages: 507–515. October. 2013.
- C68: Ian.E.H Yen, Nanyun Peng, Po-Wei Wang, Shou-de Lin. "On Convergence Rate of Concave-Convex Procedure." *Advances in Neural Information Processing Systems. Optimization for Machine Learning Workshop*. Pages: 1-5. December. 2012.
- C69: Tsung-Hsien Chiang, Hung-Yi Lo, and Shou-de Lin. "A Ranking-based KNN Approach for Multi-Label Classification." *Asian Conference on Machine Learning, JMLR Workshop & Conference Proceedings*, pages: 81-96. November, 2012.

- C70: Jung-Wei Chou, Shou-De Lin and Chen-Mou Cheng. "On the Effectiveness of using State-of-the-art Machine Learning Techniques to Launch Cryptographic Distinguishing Attacks." Proceedings of the 5th ACM workshop on Security and artificial intelligence. Pages: 105-109. October, 2012.
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