Guang-Tong Zhou

CONTACT

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Homepage https://zhougt.github.io/

LinkedIn https://www.linkedin.com/in/gtzhou/

SKILLS

Programming • Python, C++

Machine Learning • Experienced with state-of-the-art ML algorithms and end-to-end ML systems

Ads Ranking • Experienced with large-scale Ads Recommender System and Ads Signal Loss solutions

Cloud Security • Experienced with malicious activity detection, log analysis, and health monitoring

Computer Vision • Experienced with image/video understanding, object recognition, and semantic segmentation

EDUCATION

Ph.D.• Computer Science, Simon Fraser University, Burnaby, BC, Canada2015/11Master of Science• Computer Science, Shandong University, Jinan, China2010/06

Bachelor of Science • **Computer Science,** Shandong University, Jinan, China 2007/06

TECHNICAL WORK EXPERIENCE

Staff Research Scientist Meta Ads CoreML, Bellevue, WA 2018/06-Now

• 2019: Increased **Meta revenue by ~1%** with multi-stage recall optimization.

• 2020: Increased Meta revenue by ~1% with ads selection modeling.

• 2021: Increased **Meta revenue by ~0.5%** with model calibration bias reduction.

2022-Now: Increased Meta revenue by ~1% with modeled attribution and App AEMv2.

Principal Researcher Oracle Labs, Vancouver, Canada 2015/12-2018/04

ML-based malicious activity detection for Oracle Public Cloud, with 5 US patents published

Intern SAP, Vancouver, Canada 2014/09-2015/05

Intern Disney Research, Pittsburgh, PA 2013/09-2013/12

RESEARCH EXPERIENCE

Research Assistant Dr. Greg Mori, Simon Fraser University, Burnaby, BC, Canada 2011/01-2015/11

• Published 10+ papers in top conferences/journals, with 1000+ citations (google scholar).

Taught Machine Learning (Fall 2011) and Data Structures and Algorithms (Spring 2011).

Paper Reviewer • Conferences: IJCAI (2013), NIPS (2014,2015,2017), CVPR (2018, 2019, 2022), ICCV (2022)

• Journals: **TKDD** (2013), **CVIU** (2014), **TPAMI** (2014, 2016, 2017)

SELECTED PUBLICATIONS

[TPAMI'19] • Structured Label Inference for Visual Understanding.

Nelson Nauata, Hexiang Hu, Guang-Tong Zhou, Zhiwei Deng, Zicheng Liao and Greg Mori.

IEEE Transactions on Pattern Analysis and Machine Intelligence, 2019.

[CVPR'16] • Learning Structured Inference Neural Networks with Label Relations.

Hexiang Hu, Guang-Tong Zhou, Zhiwei Deng, Zicheng Liao and Greg Mori.

IEEE Computer Vision and Pattern Recognition, 2016.

[THESIS'15] • Toward Scene Recognition by Discovering Semantic Structures and Parts.

Ph.D. Thesis, Simon Fraser University, 2015.

[ARXIV'15] • Hierarchical Maximum-Margin Clustering.

Guang-Tong Zhou, Sung Ju Hwang, Mark Schmidt, Leonid Sigal and Greg Mori.

arXiv:1502.01827, 2015.

[CVPRW'15] • Discovering Human Interactions in Videos with Limited Data Labeling.

Mehran Khodabandeh, Arash Vahdat, Guang-Tong Zhou, et al.

Workshop on Group and Crowd Behavior Analysis and Understanding (at CVPR), 2015.

[ECCVW'14] • Learning Action Primitives for Multi-Level Video Event Understanding.

Tian Lan, Lei Chen, Zhiwei Deng, Guang-Tong Zhou and Greg Mori.

International Workshop on Visual Surveillance and Re-Identification (at ECCV), 2014.

[ECCV'14] • Discovering Video Clusters from Visual Features and Noisy Tags.

Arash Vahdat, Guang-Tong Zhou and Greg Mori. European Conference on Computer Vision, 2014.

[NIPS'13] • Latent Maximum Margin Clustering.

Guang-Tong Zhou, Tian Lan, Arash Vahdat and Greg Mori.

Neural Information Processing Systems, 2013.

[CVPR'13] • Learning Class-to-Image Distance with Object Matchings.

Guang-Tong Zhou, Tian Lan, Weilong Yang and Greg Mori. IEEE Computer Vision and Pattern Recognition, 2013.

[MLJ'13] • Mass Estimation.

Kai Ming Ting, Guang-Tong Zhou, Fei Tony Liu and Swee Chuan Tan.

Machine Learning Journal, 90(1):127-160, 2013.

[PR'12] • Relevance Feature Mapping for Content-Based Multimedia Information Retrieval.

Guang-Tong Zhou, Kai Ming Ting, Fei Tony Liu and Yilong Yin.

Pattern Recognition, 45(4):1707-1720, 2012.

[KDDW'10] • Relevance Feature Mapping for Content-Based Image Retrieval.

Guang-Tong Zhou, Kai Ming Ting, Fei Tony Liu and Yilong Yin.

Workshop on Multimedia Data Mining (at KDD), 2010.

[KDD'10] • Mass Estimation and Its Applications.

Kai Ming Ting, Guang-Tong Zhou, Fei Tony Liu and Swee Chuan Tan.

ACM SIGKDD Conference on Knowledge Discovery and Data Mining, 2010.

[EJASP'10] • K-means Based Fingerprint Segmentation with Sensor Interoperability.

Gongping Yang, Guang-Tong Zhou, Yilong Yin and Xiukun Yang.

EURASIP Journal on Advances in Signal Processing, 2010(1):729378, 2010.