

## SKILLS

Programming	• Python, C++, Matlab, JavaScript
Machine Learning	• Experienced with <b>deep learning</b> , <b>large margin methods</b> , <b>clustering</b> , and <b>anomaly detection</b>
Computer Vision	• Experienced with <b>image &amp; video understanding</b> , <b>object recognition</b> , and <b>semantic segmentation</b>
Cloud Security	• Experienced with <b>log analysis</b> , and <b>health monitoring</b>

## EDUCATION

Ph.D.	• <b>Computer Science</b> , Simon Fraser University, Burnaby, BC, Canada	2015
Master of Science	• <b>Computer Science</b> , Shandong University, Jinan, China	2010
Bachelor of Science	• <b>Computer Science</b> , Shandong University, Jinan, China	2007

## TECHNICAL WORK EXPERIENCE

Senior Researcher	Oracle Labs, Vancouver, Canada	Dec 2015-Present
	• <b>Deep learning for cloud security</b> : log analysis and health monitoring for Oracle Public Cloud (OPC)	
Intern	SAP, Vancouver, Canada	Sept 2014-May 2015
	• <b>Interactive graph visualization</b> : implement with JavaScript, jQuery, d3, SVG, etc.	
Intern	Disney Research, Pittsburgh, PA, USA	Sept-Dec 2013
	• <b>Scenery part discovery</b> : implemented MCF solver in C++ to speed up clustering by 100 times	

## RESEARCH EXPERIENCE

Research Assistant	Dr. Greg Mori, Simon Fraser University, Burnaby, BC, Canada	Jan 2011-Nov 2015
	• <b>Structured inference neural networks</b> : jointly recognize image labels at multiple concept layers	
	• <b>Neural time machine</b> : predict when, where and what is the next activity in sport videos	
	• <b>Max-margin clustering</b> : extend with latent variables and hierarchical structures	
	• <b>Semantic segmentation</b> : leverage global object information for local pixel labelings	
	• <b>Scene understanding</b> : recognize scenes from a collection of objects and surfaces	
	• <b>Video event analysis</b> : discover events in YouTube videos; recognize falling in nursing home videos	
	• <b>Anomaly detection</b> : contextual anomaly detection in categorical relational data	
Visiting Student	Dr. Kai Ming Ting, Monash University, Churchill, Vic, Australia	Aug 2009-Feb 2010
	• <b>Mass estimation</b> : design and apply it for outlier detection, information retrieval and regression	
Visiting Student	Dr. Zhi-Hua Zhou, Nanjing University, Nanjing, Jiangsu, China	Aug 2008-Jan 2009
	• <b>Content-based image retrieval</b> : distance metric learning for relevance feedback	

## OTHER EXPERIENCE

Teaching Assistant	Simon Fraser University, Burnaby, BC, Canada
	• Taught <b>Machine Learning</b> (Fall 2011) and <b>Data Structures and Algorithms</b> (Spring 2011)
Reviewer	• Conferences: <b>IJCAI</b> (2013), <b>NIPS</b> (2014,2015,2017), <b>CVPR</b> (2018)
	• Journals: <b>TKDD</b> (2013), <b>CVIU</b> (2014), <b>TPAMI</b> (2014, 2016, 2017)
Web Master	• <b>ACM SIGKDD Conference 2012</b> (kdd2012.sigkdd.org)

## PUBLICATIONS

- [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.