# Xiaopeng Yang

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## **Summary**

Research experience in machine learning and its applications for 5+ years. Authored or co-authored over 10 papers in journals and conferences. Hold 2 projects transferred successfully from academy to industry. Extensive public speaking experience with superior ability to develop compelling and coherent presentations. Able to work in a high-stress, fast-paced environment.

#### **Skills**

[Programming Languages]	Python	Java	C++	JavaScript	SQL	MATLAB
		$\bigstar$	$\bigstar$	$\Diamond$	$\Diamond$	$\Diamond$
proficient	🛧 familiar		🧡 general			
[Frameworks and tools]	Tensorflow	, React, Mo	ngoDB, My	SQL, Git, Jekyll,	, Markdov	vn, LaTex

# Experience

[Postdoctoral Fellow] — [University of Waterloo, Waterloo, Canada]

[2016.10] — [current]

- Designed a novel deep neural model for poetry generation
- Developed a Chinese poetry generation system based on Deep Learning (Python+Tensorflow) (transferred to Boyan Dodo Chabot)
- Built two human evaluation websites for poetry quality assessment (JavaScript+MongoDB)
  (React+MySQL)

[Research Intern] — [National Institute of Informatics, Tokyo, Japan]

[2014.09] - [2015.02]

 Designed an algorithm based on metric learning for image search re-ranking (published in IEEE Transactions on Image Processing 2016)

[Research Intern] — [Microsoft Research Asia, Beijing, China]

[2014.02] - [2014.07]

- Designed a graph-based video duplicate detection algorithm
- Developed a video duplicate detection system (C++)(transferred to Bing Video Search)

[Software Engineer Intern] — [University of Chinese Academy of Sciences, [2012.09] — [2013.02] Beijing, China]

- Developed Weibo analysis system including data analysis and prediction (Java)
- Developed the demonstration website of Weibo analysis system (JavaScript)

### Education

[University of Chinese Academy of Sciences] – [Ph.D., Beijing, China] [2012.09] – [2016.07]

Major: Computer Application Technology

Research domain: Multimedia Content Analysis, Multimedia Information Retrieval

[Shandong Normal University] - [M.S., Jinan, China] [2010.09] - [2012.07]

Major: Computer Software and Theory

[Shandong Normal University] – [B.S., Jinan, China] [2006.09] – [2010.07]

Major: Computer Science and Technology

### **Publications**

Xiaopeng Yang, Xiaowen Lin, Shunda Suo, and Ming Li. Generating Thematic Chinese Poetry using Conditional Variational Autoencoders with Hybrid Decoders. arXiv preprint arXiv:1711.07632, 2017. Xiaopeng Yang, Tao Mei, Yongdong Zhang, Jie Liu, and Shin'ichi Satoh. Web Image Search Re-ranking with Click-based Similarity and Typicality. IEEE Transactions on Image Processing, vol. 25, no. 10, pp. 4617-4630, Oct. 2016.

Yongdong Zhang, Xiaopeng Yang, and Tao Mei. Image Search Reranking with Query-dependent Click-based Relevance Feedback. IEEE Transactions on Image Processing, vol. 23, no. 10, pp. 4448-4459, Oct. 2014.

**Xiaopeng Yang**, Tao Mei, and Yongdong Zhang. Rescue Tail Queries: Learning to Image Search Rerank via Click-wise Multimodal Fusion. In Proceedings of the 22nd ACM International Conference on Multimedia, 2014, pp. 537-546. [Full paper, 19.2% acceptance rate]

**Xiaopeng Yang**, Yongdong Zhang, Ting Yao, Zheng-Jun Zha, and Chong-Wah Ngo. Click-boosting Random Walk for Image Search Reranking. In Proceedings of the 5th International Conference on Internet Multimedia Computing and Service, 2013, pp. 1-6. [Best paper award]

**Xiaopeng Yang**, Yongdong Zhang, Ting Yao, Chong-Wah Ngo, and Tao Mei. Click-boosting Multi-modality Graph-based Reranking for Image Search. Multimedia Systems, vol. 21, no. 2, pp. 217-227, 2015.

5 papers were published during masters, including 3 first-author papers (refereed).

### Awards & Honors

Outstanding Graduate of Beijing, China (2016); Google Anita Borg Memorial Scholarship (2015); Stars of Tomorrow of Microsoft Research Asia, 2 years (2013, 2014); Chinese Government Scholarship for Ph.D. Candidates (2014); UCAS Excellent Student Pacesetter (2014); UCAS Excellent Student Leader, 2 years (2013, 2014); Excellent Bachelor Thesis of Shandong Province, China (2010); Excellent Student of Shandong Province, China (2009)