Xiaopeng Yang

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Summary

Currently a postdoctoral fellow at the University of Waterloo. Research experience in machine learning and related fields for 7+ years. Research topics include, but are not limited to, natural language processing and image processing. 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 and fast-paced environment.

Skills

[Programming Languages]	Python	Java	C#	JavaScript	SQL	MATLAB
						

 proficient  familiar  general

[Frameworks and tools] Tensorflow, React, MongoDB, MySQL, Git, Jekyll, Markdown, LaTex

Experience

[Postdoctoral Fellow] — [University of Waterloo, Waterloo, Canada] [2016.10] — [current]

- Designed a novel deep neural model based on variational autoencoders 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 a novel algorithm based on metric learning and multi-modality fusion for image search re-ranking (published in **IEEE Transactions on Image Processing 2016**)

[Research Intern] — [Microsoft Research, 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] — [Chinese Academy of Sciences, Beijing, China] [2012.09] — [2013.02]

- 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. **[Accepted by IJCAI-ECAI-2018, 20.5% acceptance rate]**

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 Re-rank 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)