Xiang Zhang

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Education

Ph.D. Student in Computer Science, New York University

Sep 2013 - Present

- Advised by professor Yann LeCun. Expected graduation: Sep 2018
- Conducting research in machine learning, with focus on deep learning

Master of Science in Computer Science, New York University Sep 2011 - Sep 2013

- Thesis: "PAC-learning for Energy-based Models", with professor Yann LeCun
- GPA: 4.0/4.0

Bachelor of Engineering in Computer Science, Tianjin University Sep 2007 - Jul 2011

- 2011 Best Undergraduate Thesis: "Automatic Grayscale Image Colorization"
- Overall Average Score: 82%, Rank: 7/102 (junoir and senior years)

Work Experience

Research Intern, Facebook Inc. May 2017 - Sep 2017, Jun 2015 - Aug 2015

• Deep learning for natural language processing http://www.facebook.com

Software Engineering Intern, Google Inc.

May 2014 - Aug 2014

- Coded up a visualization tool for deep learning http://www.google.com
- Developing object detection pipelines for streetview and aerial imagery

Teaching Experience

T.A. for Big Data: Large Scale Machine Learning

Jan 2013 - May 2013

- Machine learning course taught by professor Yann LeCun and John Langford
- Aid teaching activities, design and grade assignments.

T.A. for Machine Learning

Sep 2012 - Dec 2012

- Graduate-level machine learning course taught by professor Yann LeCun
- Design and grade assignments, and hold office hours for questions

Open Source Projects

Tunnel

Aug 2016 - Present

- Data-driven Framework for Distributed Machine Learning in Torch 7
- https://github.com/zhangxiangxiao/tunnel

Thunder

Aug 2014 - Present http://thunder.nyc

- C++11 tensor library
- Aiming for large-scale deep learning across devices

Academic Activities

Reviewer for Conferences and Journals

2014 - Present

- Neural Information Processing Systems (NIPS) 2016, 2017
- IEEE Transactions on Knowledge and Data Engineering (TKDE) 2017
- IEEE Transactions on Image Processing (TIP) 2014

Volunteer for Conferences

2016 - Present

- International Conference on Machine Learning (ICML) 2016
- International Joint Conference on Artificial Intelligence (IJCAI) 2016

Participation of Competitions

2011 - Present

- OverFeat in Image-Net Large-Scale Visual Recognition Challenge 2013
- 3 Independent Challenge-Cup Prizes at Tianjin University 2011

Invited Talks

Toutiao.com.

Beijing, China. Jan 2017

• Character-level Convolutional Networks for Text Classification

Networkd Insights Inc.

Chicago, USA. March 2016

• Deep learning with applications in computer vision and language processing

Wechat group, Tencent Inc.

Beijing, China. Jan 2016

• Representation learning for text

Refereed Publications

Xiang Zhang, Yann LeCun. Universum Prescription: Regularization using Unlabeled Data. Thirty-First AAAI Conference on Artificial Intelligence (AAAI 2017).

Jesse Dodge, Andreea Gane, **Xiang Zhang**, Antoine Bordes, Sumit Chopra, Alexander Miller, Arthur Szlam, Jason Weston. Evaluating Prerequisite Qualities for Learning End-to-End Dialog Systems, International Conference on Learning Representations (ICLR 2016).

Xiang Zhang, Junbo Zhao, Yann LeCun. Character-level Convolutional Networks for Text Classification. Advanced in Neural Information Processing Systems 28 (NIPS 2015)

Pierre Sermanet, David Eigen, **Xiang Zhang**, Michael Mathieu, Rob Fergus, Yann LeCun. OverFeat: Integrated Recognition, Localization and Detection using Convolutional Networks. International Conference on Learning Representations (ICLR 2014).

Shiguang Liu, **Xiang Zhang**. Image Colorization Based on Texture Map. Journal of Electronic Imaging, Volume 22(1), 013011.

Shiguang Liu, **Xiang Zhang**. Automatic Grayscale Image Colorization using Histogram Regression. Pattern Recognition Letters, Volume 33(13), 2012/10/1.

Shiguang Liu, Hanqiu Sun, **Xiang Zhang**. Selective Color Transferring via Ellipsoid Color Mixture Map. Journal of Visual Communication and Image Representation, Volume 23, Issue 1, January 2012, Pages 173-181.

Xiang Zhang, Ce Yu. Fast n-point Correlation Function Approximation with Recursive Convolution for Scalar Fields. IEEE Third International Conference on Cloud Computing Technology and Science, 2011, Pages 634-639.

Xiang Zhang, Shiguang Liu. Texture Transfer in Frequency Domain. 6th International Conference on Image and Graphics, August 15 2011, Pages 123-128.

Shiguang Liu, **Xiang Zhang**, Jingting Wu, Jizhou Sun, Qunsheng Peng. Gray-scale Image Colorization based on the Control of Single-parameter. Journal of Image and Graphics (In Chinese), 2011, volume 16(7), pages 1297-1302.

Technical Reports

Xiang Zhang, Yann LeCun. Which Encoding is the Best for Text Classification in Chinese, English, Japanese and Korean? arXiv:1708.02657.

Xiang Zhang, Yann LeCun. Text Understanding from Scratch. arXiv:1502.01710.