Yi Yang

Baidu USA LLC Mobile: (+1) 949-272-6066 Contact Email: yangyi05@baidu.com, yangyi02@gmail.com 1195 Bordeaux Drive Webpage: http://www.ics.uci.edu/~yyang8 Sunnyvale, CA, 94089 Interests Deep Learning, Computer Vision, Machine Learning, Reinforcement Learning **EDUCATION** University of California Irvine 2008 - 2013 • Ph.D. in Computer Science GPA: 3.95/4.0 • Advisor: Prof. Deva Ramanan, co-advisor: Prof. Charless Fowlkes Hong Kong University of Science & Technology 2006 - 2008 • M.Phil. in Industrial Engineering and Logistic Management GPA: 3.5/4.0

Tsinghua University

• Advisor: Prof. Jeff Hong

2002 - 2006 • B.S. in Automation GPA: 3.8/4.0

• Top 10% with Excellent Graduation Award

EXPERIENCE Baidu Research, Silicon Valley

10/2013 - Present

Research Scientist, Institute of Deep Learning

Sunnyvale, CA

- Dynamic computational time for visual attention model.
- Semantic image segmentation with deep convolutional neural networks.
- Object detection with deep convolutional neural networks.
- Image captioning and question answering with multimodal recurrent neural networks.
- Learning from massive noisy labeled data for visual classification.
- Feedback neural networks for object detection and fine-grained recognition.

Google, Mountain View

06/2012 - 09/2012

Software Engineer Intern, Google Shopping Team Mentor: Emilio Antunez, co-mentor: Tianli Yu

Mountain View, CA

• Large scale human pose estimation for visual fashion clothing retrieval.

Microsoft Research, Silicon Valley

06/2011 - 09/2011

Research Intern, Interactive Visual Media Lab

Mountain View, CA

Mentor: Simon Baker, co-mentor: Anitha Kannan

• Proxemics recognition for multiple people interactions in personal photo albums.

University of California Irvine

09/2008 - 08/2013

Research Assistant, Computer Vision Lab

Irvine, CA

Advisor: Prof. Deva Ramanan, co-advisor: Prof. Charless Fowlkes

- Human detection and parsing under occlusion and truncation.
- Articulated pose estimation with flexible mixtures-of-parts.
- Layered object detection for multi-class image segmentation.

PUBLICATIONS 20. Zhichao Li, Yi Yang, Xiao Liu, Shilei Wen, Wei Xu, "Dynamic Computational Time for Visual Attention", in Arxiv 2017.

- 19. Xiao Liu, Tian Xia, Jiang Wang, Yi Yang, Feng Zhou, Yuanging Lin, "Fully Convolutional Attention Networks for Fine-Grained Recognition", in Arxiv 2016.
- 18. Liang-Chieh Chen, Yi Yang, Jiang Wang, Wei Xu, and Alan L. Yuille, "Attention to Scale: Scale-aware Semantic Image Segmentation", in CVPR 2016.
- 17. Jiang Wang, Yi Yang, Junhua Mao, Zhiheng Huang, Chang Huang, Wei Xu, "CNN-RNN: A Unified Framework for Multi-label Image Classification", in CVPR 2016. (Oral; Acceptance Rate: 3.9%)

- 16. Haonan Yu, Jiang Wang, Zhiheng Huang, **Yi Yang**, Wei Xu, "Video Paragraph Captioning Using Hierarchical Recurrent Neural Networks", in *CVPR 2016*. (Oral; Acceptance Rate: 3.9%)
- 15. Lichao Huang, **Yi Yang**, Yafeng Deng, Yinan Yu, "DenseBox: Unifying Landmark Localization with End to End Object Detection", in *Arxiv* 2015.
- 14. Junhua Mao, Wei Xu, **Yi Yang**, Jiang Wang, Zhiheng Huang, Alan Yuille, "Learning like a Child: Fast Novel Visual Concept Learning from Sentence Descriptions of Images", in *ICCV 2015*.
- 13. James Supančič, Gregory Rogez, **Yi Yang**, Jamie Shotton, Deva Ramanan, "Depth-based hand pose estimation: data, methods, and challenges", in *ICCV 2015*.
- 12. Chunshui Cao, Xianming Liu, **Yi Yang**, et al., "Look and Think Twice: Capturing Top-Down Visual Attention with Feedback Convolutional Neural Networks", in *ICCV 2015*.
- 11. Tong Xiao, Tian Xia, **Yi Yang**, Chang Huang, Xiaogang Wang, "Learning from Massive Noisy Labeled Data for Image Classification", in *CVPR 2015*.
- 10. Junhua Mao, Wei Xu, **Yi Yang**, Jiang Wang, Zhiheng Huang and Alan Yuille, "Deep Captioning with Multimodal Recurrent Neural Networks", in *ICLR 2015*.
- 9. Junhua Mao, Wei Xu, **Yi Yang**, Jiang Wang and Alan Yuille, "Explain Images with Multimodal Recurrent Neural Networks", in *NIPS workshop 2014*.
- 8. Golnaz Ghiasi, **Yi Yang**, Charless Fowlkes and Deva Ramanan, "Parsing Occluded People", in *CVPR* 2014.
- 7. Krishnan Ramnath, Simon Baker, Lucy Vanderwende, Motaz El-Saban, Sudipta Sinha, Anitha Kannan, Noran Hassan, Michel Galley, **Yi Yang**, Deva Ramanan, Alessandro Bergamo, and Lorrenzo Torresani, "AutoCaption: Automatic Caption Generation for Personal Photos", in *WACV* 2014.
- 6. **Yi Yang** and Deva Ramanan, "Articulated Human Detection with Flexible Mixtures-of-Parts", in *PAMI 2013*.
- 5. **Yi Yang**, Simon Baker, Anitha Kannan and Deva Ramanan, "Recognizing Proxemics in Personal Photos", in *CVPR 2012*.
- 4. **Yi Yang**, Sam Hallman, Deva Ramanan and Charless Fowlkes, "Layered Object Models for Image Segmentation", in *PAMI 2012*.
- 3. **Yi Yang** and Deva Ramanan, "Articulated Pose Estimation with Flexible Mixtures-of-Parts", in *CVPR 2011*. (Oral; Acceptance Rate: 3.5%)
- 2. Jeff Hong, **Yi Yang**, and Liwei Zhang, "Sequential Convex Approximations to Joint Chance Constrained Programs: a Monte Carlo Approach," in *OR 2011*.
- 1. Yi Yang, Sam Hallman, Deva Ramanan and Charless Fowlkes, "Layered Object Detection for Multi-Class Segmentation", in CVPR 2010. (Oral; Acceptance Rate: 4.5%)

ACTIVITIES AND AWARDS

Baidu Top Performer Awards ($\ll 1\%$)	2016
Conference Review: NIPS, CVPR, ICCV, ECCV, etc.	2012 - 2015
Journal Review: PAMI, IJCV, etc.	2012 - 2015
Research Fellowship, UC Irvine	2011 - 2013
ICS Fellowship Award, UC Irvine	2008 - 2011
Research Fellowship, HKUST	2006 - 2008
Excellent Graduation Award, Tsinghua University	2006
Undergraduate Student Fellowship, Tsinghua University	2003 - 2005
3rd Prize of Chinese National Chemistry Olympiad	2001
1st Prize of Chinese National Mathematics Olympiad	2001

COMPUTER SKILLS Languages: Python, C, C++, Matlab, HTML, Java, Javascript.

Tools: Linux Shell, Vim, PyTorch, Caffe, Tensorflow, Torch, OpenCV, Latex, GNU Make.