# Yi Yang

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CONTACT

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1195 Bordeaux Drive
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
- Advisor: Prof. Jeff Hong

**Tsinghua University**                                                                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
- Occlusion aware unsupervised learning of optical flow.
- Dynamic computational time for visual attention.
- 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                        Mountain View, CA
Mentor: Emilio Antunez, co-mentor: Tianli Yu
- 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

24. Yang Wang, **Yi Yang**, Zhenheng Yang, Liang Zhao, Peng Wang, Wei Xu, "Occlusion Aware Unsupervised Learning of Optical Flow", in *CVPR 2018*.

23. Chunshui Cao, Xianming Liu, **Yi Yang**, et al., "Feedback Convolutional Neural Network for Visual Localization and Segmentation", in *PAMI 2018*.

22. James Supancic, Gregory Rogez, **Yi Yang**, Jamie Shotton, Deva Ramanan, "Depth-based Hand Pose Estimation: Data, Methods, and Challenges", in *IJCV 2018*.

21. Liang Zhao, Yang Wang, **Yi Yang**, Wei Xu, "Unsupervised Learning Layers for Video Analysis", in *Arxiv 2017*.

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

19. Xiao Liu, Tian Xia, Jiang Wang, **Yi Yang**, Feng Zhou, Yuanqing 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 2014 Workshop*.

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 Lorenzo 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 | | |
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| | 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 |

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| 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.