

Jianming Zhang

CONTACT	Adobe Research 321 Park Ave, San Jose, CA 95113, USA <i>Email:</i> jianmzha@adobe.com Homepage Google Scholar	
EXPERIENCE	Adobe Research Research Scientist	San Jose, CA 09/2016-present
	Image and Video Computing Group, Boston Univ. <i>Research Assistant</i> Advisor: Professor Stan Sclaroff	Boston, MA 09/2011-present
	Object Tracking <ul style="list-style-type: none">- Model free single object tracking.- Online multi-person tracking. Image Analysis and Visual Saliency <ul style="list-style-type: none">- Salient objects subitizing using deep learning.- Eye fixation prediction and salient object detection. Action Recognition and Localization <ul style="list-style-type: none">- Video classification using deep learning.- Action recognition and localization.	
	Imagination Lab, Adobe Systems, Inc. <i>Intern</i> Mentors: Zhe Lin, Jon Brandt, Xiaohui Shen, Chen Fang	San Jose, CA 05/2015-08/2016
	Image tag auto-annotation <ul style="list-style-type: none">- Large scale image analysis using deep learning.	
	Imagination Lab, Adobe Systems, Inc. <i>Intern</i> Mentors: Zhe Lin, Xiaohui Shen, Radomír Měch, Brian Price	San Jose, CA 01/2014-04/2014
	Saliency Detection <ul style="list-style-type: none">- Developed a fast saliency detection method. Automatic Image Cropping <ul style="list-style-type: none">- Developed an automatic image cropping method.- Delivered the algorithm to the product teams.	
EDUCATION	Boston University PhD in Computer Science Thesis: <i>Visual Saliency Computation for Image Analysis</i> Advisor: Professor Stan Sclaroff	Boston, MA 09/2011-09/2016
	Tsinghua University M.S. in Mathematical Science Thesis: <i>Multi-camera Tracking Using Particle Filtering</i> Advisor: Associate Professor Binheng Song	Beijing, China 09/2008-06/2011
	Tsinghua University B.S. in Mathematical Science	Beijing, China 09/2004-06/2008

PUBLICATIONS

- Jianming Zhang**, Zhe Lin, Jonathan Brandt, Xiaohui Shen, Stan Sclaroff. “Top-down Neural Attention by Excitation Backprop.” In *Proc. of European Conference on Computer Vision (ECCV)*, oral, 2016.
- Jianming Zhang**, Stan Sclaroff, Zhe Lin, Xiaohui Shen, Brian Price and Radomír Měch. “Unconstrained Salient Object Detection via Proposal Subset Optimization.” In *Proc. of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, spotlight, 2015.
- Jianming Zhang**, Stan Sclaroff, Zhe Lin, Xiaohui Shen, Brian Price and Radomír Měch. “Minimum Barrier Salient Object Detection at 80 FPS.” In *Proc. of the IEEE International Conference on Computer Vision (ICCV)*, oral, 2015.
- Jianming Zhang** and Stan Sclaroff. “Exploiting Surroundedness for Saliency Detection: A Boolean Map Approach.” *IEEE Transaction Pattern Analysis and Machine Intelligence (TPAMI)*, 2015.
- Jianming Zhang**, Shugao Ma, Mehrnoosh Sameki, Stan Sclaroff, Margrit Betke, Zhe Lin, Xiaohui Shen, Brian Price and Radomír Měch. “Salient Object Subitizing.” In *Proc. of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2015.
- Jianming Zhang**, Shugao Ma and Stan Sclaroff. “MEEM: Robust Tracking via Multiple Experts using Entropy Minimization.” In *Proc. of the European Conference on Computer Vision (ECCV)*, 2014.
- Jianming Zhang** and Stan Sclaroff. “Saliency Detection: A Boolean Map Approach.” In *Proc. of the IEEE International Conference on Computer Vision (ICCV)*, 2013.
- Shugao Ma, **Jianming Zhang**, Nazli Ikizler-Cinbis and Stan Sclaroff. “Action Recognition and Localization by Hierarchical Space-Time Segments.” In *Proc. of the IEEE International Conference on Computer Vision (ICCV)*, 2013.
- Zheng Wu, **Jianming Zhang**, and Margrit Betke. “Online Motion Agreement Tracking.” In *Proc. of the 24th British Machine Vision Conference (BMVC)*, 2013.
- James M. Rehg, Gregory D. Abowd, Agata Rozga, Mario Romero, Mark A. Clements, Stan Sclaroff, Irfan Essa, Opal Y. Ousley, Yin Li, Chanh Kim, Hrishikesh Rao, Jonathan C. Kim, Liliana Lo Presti, **Jianming Zhang**, Denis Lantsman, Jonathan Bidwell, and Zhefan Ye. “Decoding Children’s Social Behavior.” In *Proc. of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*. 2013.
- Jianming Zhang**, Liliana Lo Presti and Stan Sclaroff, “Online Multi-Person Tracking by Tracker Hierarchy.” In *Proc. of the IEEE Conference on Advanced Video and Signal Based Surveillance (AVSS)*, 2012.

PATENTS

Saliency Map Computation (US20160104054 A1)
5 more patents pending (4 US and 1 International)

PROFESSIONAL
SERVICE

Reviewer for:

- IEEE Transactions on Pattern Analysis and Machine Intelligence
- International Journal of Computer Vision
- IEEE Transactions on Multimedia
- Signal Processing: Image Communication
- IEEE Transactions on Cybernetics
- Journal of Electronic Imaging
- Image and Vision Computing
- CVPR '12, '13, '16 (external)

- ECCV '16 (external)
- ACCV '12 (external)

SKILLS

- Proficiency in C++, Matlab and Python. Product development experience in C++.
- Extensive programming experience with OpenCV.