YUKE ZHU

ADDRESS:
Gates Room 242, 353 Serra Mall
Stanford, CA, USA 94305

EMAIL: yukez@cs.stanford.edu
MOBILE: +1-415-812-6813
WEBSITE: www.stanford.edu/~yukez

RESEARCH INTERESTS

Computer Vision, Machine Learning, Knowledge Representation, and Robotics

EDUCATION

Stanford University, PhD in Computer Science 2015 – present
- Overall GPA: 4.0 / 4.0
- Advisor: Prof. Fei-Fei Li and Prof. Silvio Savarese

Stanford University, MSc in Computer Science 2013 – 2015
- Overall GPA: 3.98 / 4.0
- Advisor: Prof. Fei-Fei Li

Simon Fraser University, BSc in Computer Science 2011 – 2013
- Overall GPA: 4.27 / 4.3 (First class with distinction)
- Advisor: Prof. Greg Mori and Prof. Oliver Schulte

Zhejiang University, BEng in Computer Science and Technology 2009 – 2013
- Overall GPA: 3.96 / 4.0 (Ranked 1st out of 31)

PUBLICATIONS

Neural Task Programming: Learning to Generalize Across Hierarchical Tasks. Conference on Robot Learning (CoRL)*, 2017*. Danfei Xu, Yuke Zhu, Yuan Gao, Animesh Garg, Li Fei-Fei, Silvio Savarese

ADAPT: Zero-Shot Adaptive Policy Transfer for Stochastic Dynamical Systems. *International Symposium on Robotics Research (ISRR), 2017.* James Harrison*, Animesh Garg*, Boris Ivanovic, Yuke Zhu, Silvio Savarese, Li Fei-Fei, Marco Pavone

Visual Semantic Planning using Deep Successor Representations. *International Conference on Computer Vision (ICCV), 2017*. Yuke Zhu*, Daniel Gordon*, Eric Kolve, Dieter Fox, Li Fei-Fei, Abhinav Gupta, Roozbeh Mottaghi, Ali Farhadi [* indicates equal contribution]

Adversarially Robust Policy Learning through Active Construction of Physically-Plausible Perturbations. *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2017.* Ajay Mandlekar*, Yuke Zhu*, Animesh Garg*, Li Fei-Fei, Silvio Savarese [* indicates equal contribution]

Knowledge Acquisition for Visual Question Answering via Iterative Querying. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2017.* Y. Zhu, J. J. Lim, and L. Fei-Fei

Scene Graph Generation by Iterative Message Passing. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2017.* D. Xu, Y. Zhu, C. B. Choy, L. Fei-Fei

Target-driven Visual Navigation in Indoor Scenes using Deep Reinforcement Learning. *IEEE International Conference on Robotics and Automation (ICRA), 2017.* Y. Zhu, R. Mottaghi, E. Kolve, J. J. Lim, A. Gupta, L. Fei-Fei, and A. Farhadi

Visual Genome: Connecting Language and Vision Using Crowdsourced Dense Image Annotations. *International Journal of Computer Vision (IJCV)*, 2017. R. Krishna, Y. Zhu, O. Groth, J. Johnson, K. Hata, J. Kravitz, S. Chen, Y. Kalantidis, L.-J. Li, D. A. Shamma, M. Bernstein, and L. Fei-Fei

Visual7W: Grounded Question Answering in Images. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2016.* Y. Zhu, G. Oliver, M. Bernstein, and L. Fei-Fei.

Action Recognition by Hierarchical Mid-level Action Elements. *International Conference on Computer Vision (ICCV), 2015*. T. Lan*, Y. Zhu*, A. Zamir, and S. Savarese [* indicates equal contribution]

Reasoning About Object Affordances in a Knowledge Base Representation. *European Conference on Computer Vision (ECCV), 2014.* Y. Zhu, A. Fathi, and L. Fei-Fei

Modelling Relational Statistics With Bayes Nets. *Machine Learning Journal 94(1):105-125, 2014*. O. Schulte, H. Khosravi, A. Kirkpatrick, T. Gao, and Y. Zhu

StrokeBank: Automating Personalized Chinese Handwriting Generation. *AAAI Conference on Innovative Applications of Artificial Intelligence (IAAI), 2014.* A. Zong and Y. Zhu

Latent Spatio-temporal Models for Action Localization and Recognition in Nursing Home Surveillance Video. *IAPR International Conference on Machine Vision Applications (MVA), 2013*. Y. Zhu, T. Lan, Y. Yang, S. Robinovitch, and G. Mori

Graphical Model-based Learning in High Dimensional Feature Spaces. *AAAI Conference on Artificial Intelligence (AAAI), 2013*. Z. Song and Y. Zhu

PREPRINTS

Building a Large-scale Multimodal Knowledge Base System for Answering Visual Queries. *arXiv:1507.05670.* Y. Zhu, C. Zhang, C. Ré, and L. Fei-Fei

SERVICES

Conference reviewer: CVPR, ECCV, ICCV, IROS, ICRA
Journal reviewer: T-PAMI, RL-L
Program committee: ICCV 2017 Workshop: Vision in Practice on Autonomous Robots (ViPAR)

TEACHING EXPERIENCE

Teaching Assistant, *Stanford University* Winter 2014-2015
CS 231N: Convolutional Neural Networks for Visual Recognition

Teaching Assistant, *Stanford University* Fall 2014-2015
CS 131: Computer Vision: Foundations and Applications

Teaching Assistant, *Stanford University* Summer 2013-2014
CS 193C: Client-Side Internet Technologies

Teaching Assistant, *Stanford University* Spring 2013-2014
CS 431: High-Level Vision - Behaviors, Neurons and Computational Models

PROFESSIONAL EXPERIENCE

Research Intern Jun - Sept 2016
Google DeepMind, London, England, UK

Research Intern Jun - Sept 2016
Allen Institute for Artificial Intelligence, Seattle, WA, USA
- Deep reinforcement learning for robotic perception

Research Intern May - Aug 2015

Snapchat Inc., Venice, CA, USA

- Deep learning and computer vision projects in the Snapchat Research team

Software Engineer Intern Apr – July 2013

Twitter Inc., San Francisco, CA, USA

- Growth hacking in the Activation & Messaging team for Twitter user retension

Research Assistant Jan 2012 – Apr 2013

SFU Vision and Media Lab, Burnaby, Canada

- Research in action understanding for Technology for Injury Prevention in Seniors program

Research Assistant Dec 2011 – Apr 2013

SFU Computational Logic Lab, Burnaby, Canada

- Research in statistical relational learning and probabilistic graphical models

Co-founder Aug 2011 - Aug 2013

Hangzhou Iserlohn Technology Co., Ltd., Hangzhou, China

- A startup for mobile integration, enterprise IT solutions and business information systems

Software Engineer Intern July - Aug 2011

Qingdao Topscomm Communication Co., Ltd., Qingdao, P.R.China

- Developing router testing framework for electric energy data acquisition system

HONORS/AWARDS

Honors & Scholarships

- AAAI-14 Scholarship
- National Scholarship of China 2010 & 2011 (Top 2% in Zhejiang University)
- Zhejiang University First-class Academic Excellence Scholarship
- Zhejiang University Research and Innovation Scholarship
- Simon Fraser University Entrance Scholarship
- Simon Fraser University Alumni Scholarship
- Simon Fraser University Open Scholarship

Awards & Prizes

- DDP Outstanding Academic Achievement Award
- Gold Medal in the 8th ACM/ICPC Programming Contest of Zhejiang Province
- First Prize in the 10th ACM/ICPC Programming Contest of Zhejiang University
- 1st Place in Simon Fraser University 8th Annual Winter Programming Contest
- 5th Place in the 2012 ACM Pacific Northwest Programming Contest
- Meritorious Winner in International Interdisciplinary Contest In Modeling
- First Price in National Olympiad of Informatics in Shandong Province
- Simon Fraser University President's Honour Roll
- Simon Fraser University Computing Science Graduation Award