Lifeng Fan

CONTACT INFORMATION	9407 Boelter Hall University of California, Los Angeles Los Angeles, CA 90095, USA	*Phone*: (424) 535-8754 *Email*: lfan@ucla.edu *Homepage*: https://lifengfan.github.io/

EDUCATION

University of California, Los Angeles, CA, USA 09/2016 - 06/2021 (expected)
Ph.D. Candidate in Statistics
GPA:3.97/4.00

Zhejiang University, Hangzhou, China 09/2012 - 06/2016
B.S. in Statistics, Minor in Public Management
GPA: 3.98/4.00

RESEARCH EXPERIENCE

Facebook Reality Lab, USA 06/2020 - 11/2020
Research Intern *Mentor: Tanya Jonker*
- Egocentric action anticipation via multi-scale graph representation.

DMAI Inc., Los Angeles, CA, USA 06/2019 - 03/2020
Software Engineering Intern *Mentor: Tao Yuan*
- Cognitive Platform: detecting human body pose, head pose and pointing gesture; detecting human interaction and communication; modeling human mind, including belief, attention and intention

Center for Vision, Cognition, Learning and Autonomy, UCLA 09/2016 - present
Graduate Student Researcher *Advisor: Song-Chun Zhu*
- Cooperation and Communication Mechanisms: the emergence of communicative cooperation in a problem-solving task.
- Theory of Mind: human mental state inference in VR environment and real videos
- Understanding human nonverbal communication by spatio-temporal reasoning networks
- Social Scene Understanding: inferring shared attention in social scene videos
- Cognitive Modeling: perception of human interaction based on motion trajectories

The Computational Vision and Learning Lab, UCLA 07/2015 - 09/2015
Cross-Disciplinary Scholars in Science and Technology (CSST) Program *Advisor: Hongjing Lu*
- Discovering hierarchical representations for action recognition
- Honored with Best Presentation Award for excellent research and final presentation

State Key Lab of CAD, ZJU 06/2014 - 06/2016
Research Assistant *Advisor: Ming Li*
- Texture synthesis optimization by Expectation Maximization algorithm

PUBLICATIONS (* indicates equal contribution)

Y. Zhu, T. Gao, **L. Fan**, S. Huang, M. Edmonds, H. Liu, F. Gao, C. Zhang, S. Qi, Y. Wu, J. B. Tenenbaum, S.-C. Zhu. Dark, Beyond Deep: A Paradigm Shift to Cognitive AI with Human-like Commonsense. *Engineering, Special Issue on Artificial Intelligence, 2020*

T. Yuan, H. Liu, **L. Fan**, Z. Zheng, T. Gao, Y, Zhu, S.-C. Zhu. Understanding False-Belief by Joint Inference of Object States, Robot Knowledge, and Human Beliefs. *IEEE International*

Conference on Robotics and Automation (ICRA), 2020

L. Fan*, W. Wang*, S. Huang, X. Tang and S.-C. Zhu. Understanding Human Gaze Communication by Spatio-temporal Graph Reasoning. *IEEE International Conference on Computer Vision (ICCV), 2019.*

L. Fan*, Y. Chen*, P. Wei, W. Wang and S.-C. Zhu. Inferring Shared Attention in Social Scene Videos. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018.* (Acceptance Rate: 29%)

T. Shu*, Y. Peng*, **L. Fan**, H. Lu and S.-C. Zhu. Perception of Human Interaction Based on Motion Trajectories: from Aerial Videos to Decontextualized Animations. *Topics in Cognitive Science (TopiCS), 10(1): 225 - 241, 2018.*

T. Shu*, Y. Peng*, **L. Fan**, H. Lu and S.-C. Zhu. Inferring Human Interaction from Motion Trajectories in Aerial Videos. *39th Annual Meeting of the Cognitive Science Society (CogSci), 2017.* (Oral presentation, Acceptance rate: 255/873 = 29%, Computational Modeling Prize)

SELECTED HORNORS AND AWARDS	Most Promising Computational Statistician, UCLA Statistics Department	06/2017
	Computational Modeling Prize, Cognitive Science Society	06/2017
	The 6th Ten Top Students in Zhejiang University, Zhejiang University	12/2015
	Chu Kochen Scholarship, Zhejiang University	10/2015
	Best Presentation Award, UCLA-CSST Summer Research Program	09/2015
	Honorable Mention, Mathematical Contest in Modeling (MCM)	04/2015
	Tang Lixin Scholarship, Zhejiang University	10/2014 - present
	First Prize in the 12th Mathematical Modeling Contest of Zhejiang University	06/2014
	National Scholarship of China, Ministry of Education, China	2013, 2014

TEACHING EXPERIENCE

University of California, Los Angeles, Department of Statistics

STATS 202A: Statistics Programming   Fall 2017
- Teaching Assistant

STATS 10: Introduction to Statistical Reasoning   Spring 2017
- Teaching Assistant

STATS 102C: Introduction to Monte Carlo Methods   Fall 2018
- Teaching Assistant

STATS 12: Intro to Statistical Methods for Geography and Environmental Studies   Winter 2018
- Teaching Assistant

STATS 100A: Introduction to Probability   Winter 2019
- Teaching Assistant

STATS 232C: Cognitive Artificial Intelligence   Spring 2020
- Teaching Assistant

PROGRAMMING LANGUAGES   C/C++, C#, Python, MATLAB, R, LaTeX, HTML

DEEP LEARNING FRAMEWORKS   Pytorch, Tensorflow, Keras