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 Expected: 06/2021
Ph.D. Candidate in Statistics
GPA:4.00/4.00

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

RESEARCH EXPERIENCE

DMAI Inc., Los Angeles, CA, USA 06/2019 - 09/2019
Summer Intern *Mentor: Yixin Zhu*
- Cognitive Platform: implementing live detection of 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*
- 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.* (Under Review)

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. (Under Review)

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 (Awarded to 10 out of all undergraduate and graduate students at Zhejiang University for meritorious achievements at Zhejiang University.)	12/2015
	Chu Kochen Scholarship, Zhejiang University (The highest honor of Zhejiang University, awarded to 12 out of 5000+ undergraduate seniors each year for exceptional academic achievements.)	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 - Teaching Assistant	Fall 2017
	STATS 12: Intro to Statistical Methods for Geography and Environmental Studies - Teaching Assistant	Winter 2018
	STATS 102C: Introduction to Monte Carlo Methods - Teaching Assistant	Fall 2018

PROGRAMMING LANGUAGES	C/C++, C#, Python, MATLAB, R, LaTeX, HTML
DEEP LEARNING FRAMEWORKS	Pytorch, Tensorflow, Keras