Tianfan Fu

CONTACT
INFORMATION

Computational Science and Engineering
Atlanta, US
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Georgia Institute of Technology
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RESEARCH
INTERESTS

Machine Learning for Healthcare, Natural Language processing, Deep Learning, Speech Processing, Bayesian Statistics.

EDUCATION

Georgia Institute of Technology, Atlanta, US.

PhD candidate, Advisor: **Jimeng Sun**, Computer Science Program in Department of Computational Science and Engineering, August 2018 - Present.

Shanghai Jiao Tong University (SJTU), Shanghai, CHINA

M.S., Advisor: **Zhihua Zhang**, Computer Science and Technology, Sept 2015 - April 2018.

Shanghai Jiao Tong University (SJTU), Shanghai, CHINA

B.E., Electronics and Electric Engineering (IEEE Honor Class), Sept 2011 - June 2015.

RESEARCH
EXPERIENCE

Research Assistant, Speech Lab, Shanghai Jiao Tong University (SJTU)

Advisor: **Kai Yu**, June 2013 - Jan 2015.
Research topic: application of deep learning on speech recognition and speaker verification.

Research Assistant, Learning and Optimization Group, Shanghai Jiao Tong University (SJTU)

Advisor: **Zhihua Zhang**, Feb 2015 - May 2017.
Research topic: Bayesian computation and inference.

Research Assistant, SunLab, Georgia Institute of Technology

Advisor: **Jimeng Sun**, Sept 2018 - Present.
Research topic: machine learning for healthcare.

INDUSTRY
EXPERIENCE

Research Intern, Machine Learning Group, Disney Research Institute, Pittsburgh

Advisor: **Cheng Zhang & Stephan Mandt**, Sept 2017 - Dec 2017.
Research topic: word/user embeddings algorithm

Intern, Dialogue System Group, AISPEECH, Suzhou, China

Project: Text Similarity for QA system, Feb 2018 - June 2018.

PUBLICATIONS

Tianfan Fu, Cheng Zhang, Stephan Mandt: Continuous Word Embedding Fusion via Spectral Decomposition. SIGNLL Conference on Natural Language Learning (**CoNLL** 2018).

Shenjian Zhao, Yujun Li, **Tianfan Fu**, Kai Li, Zhihua Zhang: **Chinese Translation of Deep Learning** (Goodfellow et al). Sales volume: **57,000+**.

Tianfan Fu, Zhihua Zhang: CPSG-MCMC: Clustering-Based Preprocessing method for Stochastic Gradient MCMC. **AISTATS** 2017: 841-850.

Tianfan Fu, Luo Luo, Zhihua Zhang: Quasi-Newton Hamiltonian Monte Carlo. Conference on Uncertainty in Artificial Intelligence, **UAI** 2016.

Wei Li, **Tianfan Fu**, Hanxu You, Jie Zhu, Ning Chen: Feature sparsity analysis for i-vector based speaker verification. **Speech Communication** 80: 60-70, 2016.

Yuan Liu, Yanmin Qian, Nanxin Chen, **Tianfan Fu**, Ya Zhang, Kai Yu: Deep feature for text-dependent speaker verification. **Speech Communication** 73: 1-13, 2015. (Citation: **71**)

Wei Li, **Tianfan Fu**, Jie Zhu: An improved i-vector extraction algorithm for speaker verification. **EURASIP J. Audio, Speech and Music Processing** 2015: 18, 2015.

Yuan Liu, **Tianfan Fu**, Yuchen Fan, Yanmin Qian, Kai Yu: Speaker verification with deep features. International Joint Conference on Neural Networks, **IJCNN** 2014: 747-753. (**Oral**)

Tianfan Fu, Yanmin Qian, Yuan Liu, Kai Yu: Tandem deep features for text-dependent speaker verification. **INTERSPEECH** 2014: 1327-1331. (**Oral**, Citation: **22**)

RELATED SKILLS
- graduate Major GPA: 3.68/4.0, undergraduate Major GPA: 3.48/4.0
- Programming Skills: Python, C++, Bash(awk, sed, etc.), latex, git, Pytorch, Tensorflow

AWARDS
- 2014 Shanghai Jiao Tong University Academic Excellence scholarship (Top 10%)
- 2016 SJTU Academic Excellence Scholarship Class-A (Top 15%)
- 2017 CS Graduates Education & Development Fund and Yang Yuanqing Education Fund (Top-3 in all graduate students in CS Department).

ACADEMIC INVOLVEMENT
- 2015,2016 Prof. Zhihua Zhang's course "Statistical Machine Learning" TA
- 2016 UAI Travel Award & Volunteer
- 2016 NIPS Reviewer (5 papers)
- 2017 AAAI sub-reviewer (2 papers)
- 2017 AISTATS Travel Award
- 2018 AAAI Reviewer (1 paper)
- 2018 Prof. Bo Yuan's course "Artificial Intelligence" TA