# hange Tang

# Education

#### **Princeton University**

PhD, Operations Research and Financial Engineering (ORFE)

- Advisors: Prof. Jianqing Fan and Prof. Chi Jin
- Research interests: statistics and machine learning, with a focus on unsupervised pretraining, transfer learning, domain adaptation, clustering and factor models

### **Peking University**

B.S., Mathematics and Applied Mathematics

• Major in Probability and Statistics, Major GPA: 3.89/4.00

## Research

\* denotes equal contribution.

#### Publications

- Jiawei Ge\*, Shange Tang\*, Jianqing Fan, Chi Jin. On the Provable Advantage of Unsupervised Pretraining. International Conference on Learning Representations (ICLR) 2024, spotlight [arXiv]
- Jiawei Ge\*, Shange Tang\*, Jianqing Fan, Cong Ma, Chi Jin. Maximum Likelihood Estimation is All You Need for Well-Specified Covariate Shift. International Conference on Learning Representations (ICLR) 2024 [arXiv]

#### Preprints

• Shange Tang, Soham Jana, Jianqing Fan. Factor Adjusted Spectral Clustering for Mixture Models. arXiv preprint arXiv:2408.12564 (2024) [arXiv]

#### Awards

Peking University Scholarship	Nov 2020
• Academic Excellent Award, Peking University	Nov 2018, 2019, 2020
• Yizheng Scholarship, Peking University	Nov 2019
• May 4th Scholarship, Peking University	Nov 2018
• First Prize in the Chinese Mathematical Competition	Nov 2018
• Elite Scholarship, School of Mathematical Sciences, PKU	Aug 2018
• Gold Medal in Russian Mathematical Olympiad (RMO)	Apr 2016
• Gold Medal in 31st Chinese Mathematical Olympiad (CMO)	Dec 2015

#### **Invited** Talks

• "Maximum Likelihood Estimation is All You Need for Well-Specified Covariate Shift," UIUC Machine Learning Seminar, Mar 2024.

#### Employment

#### **Princeton University**

Assistant in Instruction

- COS 511: Theoretical Machine Learning, Fall 2023
- ORF 245: Fundamentals of Statistics, Spring 2023, Spring 2024
- ORF 309: Probability and Stochastic Systems, Fall 2022

#### **Relevant Skills**

Languages: English, Chinese Programming: Python; LATEX; R Sep 2021 - Current

Sep 2022 – Current

# Sep 2017 – Jun 2021