

## EDUCATION

### **ETH Zurich – Computer science**

*PhD student in theoretical computer science; Research area in designing efficient algorithms for statistics via convex programming methods*

Supervised by Prof. David Steurer

**Zurich Switzerland**

Sep 2020–

### **ETH Zurich – Computational science and engineering**

*Master student in computational science and engineering; Major robotics*

**Zurich Switzerland**

Sep 2017– Sep 2020

- Cumulative GPA: 5.63 / 6.00
- Relevant Coursework: **Numerical methods for partial differential equations, Optimization for data science, randomized algorithms and probabilistic methods, Empirical process and its applications**

### **Nanjing University-physics**

*Bachelor student in physics*

**Nanjing, China**

Sep 2013– Sep 2017

- Cumulative GPA: 4.55/5.0 Rank: 11/211

## WORK EXPERIENCE

### **ETH Zurich**

*Teaching assistant*

**Zurich, Switzerland**

June 2021 –

- Design theory exercise for the graduate level course “Optimization for data science”
- Organize the first year undergraduate course “Algorithm and data structures” (with 600 students)

### **ETH Zurich**

*Research Assistant*

**Zurich, Switzerland**

April 2020 –

- Conduct research in algorithmic statistics, with focus on the robust algorithms in low rank matrix/tensor factorization. Recently working on differential privacy and debiased machine learning.
- Top conference publications:
  - Estimating Rank-One Spikes from Heavy-Tailed Noise via Self-Avoiding Walks**  
Conference on Neural Information Processing Systems(Spotlight) 2020
  - Robust recovery for stochastic block models**  
IEEE Symposium on Foundations of Computer Science 2021
  - Fast algorithm for overcomplete order-3 tensor decomposition**  
Conference on Learning Theory 2022
  - SQ Lower Bounds for Random Sparse Planted Vector Problem**  
International Conference on Algorithmic Learning Theory 2023
  - Reaching Kesten-Stigum Threshold in the Stochastic Block Model under Node Corruptions**  
Conference on Learning Theory 2023
- Services: reviewer for top conferences and journals: STOC, SODA, ALT, Theoretical Computer Science

## Skills

### **Programming**

- Programming projects(in python):
  1. Fake voice detection using neural network <https://github.com/kstoneriv3/Fake-Voice-Detection>
  2. Spectral algorithm for PCA under heavy tailed noise <https://github.com/jding42/GeneralNoiseSpectralCode>

**Awards:** The Interdisciplinary Modeling Contest Meritorious Winner(2016), Excellent graduate of Nanjing University Nanjing University(2017), Nanjing University Samsung scholarship(2015)

**Hobbies** Chess: peak online rating 2200

