

Education

Harvard University

PH.D. IN STATISTICS & M.A. IN STATISTICS, GPA 4.0/4

- Advised by Prof. Subhabrata Sen

Cambridge, MA

2019 - 2024 (Expected)

Peking University

B.S. IN MATHEMATICS AND APPLIED MATHEMATICS, GPA 3.8/4, OUTSTANDING GRADUATE

- With concentration in *Probability & Statistics*, also received systematic training in *Computational Mathematics & Numerical Methods*.

B.A. IN PHILOSOPHY (DOUBLE MAJOR)

Beijing, China

2015 - 2019

2017 - 2020

Research Experience

High Dimensional Statistics: Variational inference for high dimensional Bayesian regression models

HARVARD UNIVERSITY, GRADUATE RESEARCHER, JOINT WORK WITH SUBHABRATA SEN

- Derived a variational representation for the log-normalizing constant of the posterior distribution in Bayesian linear regression with a uniform spherical prior and an i.i.d. Gaussian design, under the “proportional” asymptotic regime.

Cambridge, MA

Sept 2019 - Jan 2022

Hypothesis Testing: Adaptive Randomization Test

HARVARD UNIVERSITY, GRADUATE RESEARCHER, JOINT WORK WITH DAE WOONG HAM

- Developed a model free adaptive sampling and testing procedure for both independence testing and conditional independence testing, with non-asymptotic exact Type-I error control;
- Used both simulation studies and theoretical analysis to demonstrate that our method achieve better Type-II error than the well-known method of Conditional Randomized Test (CRT), especially when explanatory variables are of relatively high dimension.

Cambridge, MA

Spet 2020 - Present

Machine Learning & Statistical Genetics: A CNN-based approach for admixture analysis

UNIVERSITY OF CALIFORNIA, BERKELEY, VISITING STUDENT RESEARCHER, SUPERVISED BY PROF. RASMUS NIELSEN

- Customized a CNN-based deep learning model for estimating admixture time and admixture proportions on both population and individual levels, from genome-wide DNA sequence data.

Berkeley, CA

Aug 2018 - Oct 2018

Consulting and Teaching Experience

Consultant & Teaching Fellow, Statistical Consulting Group

DEPARTMENT OF STATISTICS, HARVARD UNIVERSITY

- Actively involved in the statistics department’s statistical consulting service.
- Offered assistance and advice in all forms of data analysis and interpretation of results, including but not limited to: Experimental Design, Classification and Prediction (Machine Learning), Statistical Issues Arising from ‘Big Data’ Sets, Model Fitting, and Data Visualization.
- Assisted Prof. Lucas Janson with administrative duties, in charge of the outreach mission of our consulting group.

Cambridge MA

Jan 2020 - Dec 2021

Teaching Fellow

HARVARD UNIVERSITY

- Statistical Inference I (PhD-level), Statistical Inference II (PhD-level), Statistical Consulting (PhD-level) and Introduction to Stochastic Processes (Undergraduate-level).
- Awarded Distinction in Teaching for every semester acting as a teaching fellow.

Cambridge MA

Sept 2020 - Present

Honors & Awards

2021-22 **Distinction in Teaching**, Harvard University

Cambridge, MA

2019 **Outstanding Graduate**, Peking University

Beijing, China

2019 **Scholarship for Excellent Students in Applied Mathematics**, Peking University

Beijing, China

2018 **Fangzheng Scholarship**, Peking University

Beijing, China

2017 **Samsung Scholarship**, Peking University

Beijing, China

2017 **First Prize**, Jiang-Zehan Mathematical Modeling Contest (1/32)

Beijing, China

2014 **First Prize**, Chinese Mathematical Olympiad

Chongqing, China