FEIYAN MA

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EDUCATION

Tsinghua University

Undergraduate at Weiyang College Major in Mathematics and Physics

Sep. 2021 - Jun. 2026 (expected) Overall GPA: 3.88/4.00

SKILLS

Programming

R, Python, LATEX, Git

Language

Chinese (native), English (TOEFL 108 [R30/L26/S23/W29]), French

PUBLICATIONS & MANUSCRIPTS

(* indicates equal contribution.)

(ICLR 2025) Xinyuan Fan*, Feiyan Ma*, Chenlei Leng, Weichi Wu. "Additive Seperable Graphon Models". [link]

RESEARCH EXPERIENCE

Additive Seperable Graphon Models

Mar 2024 - Dec 2024 DSDS, Tsinghua University

Supervised by Prof. Weichi Wu

- · We use the additive separable model as a parsimonious representation of the graphon, capable of generating a low-rank connection probability matrix for network data.
- · We develop an efficient estimation approach that leverages subgraph counts to estimate the low-rank connection matrix and uses interpolation to recover the graphon functions, achieving the minimax optimal estimation rate. This model effectively addresses the well-known identification challenges associated with graphon functions.
- · We provide the convergence rate of our method, and validate its computational efficiency and estimation accuracy through comprehensive simulation studies.

RELEVANT COURSES

Undergraduate Core Courses: Probability Theory (1) (A+), Measures and Integrals (A), Numerical Analysis (A), Basic Functional Analysis (A), Linear Regression Analysis (A-), Statistical Inference (A-), Reliability Data and Survival Analysis (A), ...

Other Relevant Courses: Abstract Algebra (A), Topology (A), Differential Geometry (A), Financial Statistics (A+), Operation Research (A), Intro to Biostatistics (A), Intro to Optimization Theory (A-), Topics in Logics (A), Advanced Topics in Linear Algebra (A-), ...

Graduate-Level Courses: Advanced Mathematical Statistics I (A), Advanced Mathematical Statistics II (A-), Computational Probability (A), Probability (2) (B+)

HONORS & AWARDS

Honorable Mention, 2024 Mathematical Contest in Modeling	Feb 2024
Gold Medal, The 19th China Girls Mathematical Olympiad (CGMO)	Aug 2020
First Prize, National High School Mathematics League, Shanghai Region	Sep 2020