

Jiarong Fan

Ph.D. Candidate in Applied Mathematics

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EDUCATION

University Paris-Saclay, France <i>Ph.D. Candidate in Applied Mathematics (Doctoral School of Mathematics Hadamard)</i>	Sep 2024-Present
<u>Research Topic</u>: Conformal Prediction and Robust Uncertainty Quantification under Missing Data <u>Supervisors</u>: Juhyun PARK, Nicolas BRUNEL	
Sorbonne University & École Polytechnique, Paris <i>Master of Science in Probability and Finance (ex-DEA EL Karoui), graduated with honors (mention bien)</i>	Sep 2023-Sep 2024
Beihang University (École Centrale de Pékin), Beijing <i>Double Masters in Industrial Engineering and French General Engineering, GPA: 3.2</i>	Sep 2017-Jun 2020
Ecole Centrale de Lyon, Lyon, General Engineering	Sep 2016-Jun 2017
Beihang University (École Centrale de Pékin), Beijing <i>Bachelor of Science in Mathematics and Applied Mathematics, Rank: 5/112, GPA: 3.72</i>	Sep 2013-Jun 2017

RESEARCH PAPERS & PREPRINTS

- **Jiarong Fan**, Juhyun Park, Thuy Vo, Nicolas Brunel. Mask-Conditional Conformal Prediction: Valid Uncertainty for All Missing Data Mechanisms. AISTATS 2026, Poster
- **Jiarong Fan**, Juhyun Park, Thuy Vo. Conformal Prediction for Water Flow at Unseen Stations and Resource Allocation Policy Design. Under review, 2025
- **Jiarong Fan**, Juhyun Park, Thuy Vo, Nicolas Brunel. Mask-Adaptive Conformal Prediction via Tree Embeddings on General Missing Data Mechanisms. Under review, 2026
- **Jiarong Fan**, Juhyun Park, Thuy Vo, Nicolas Brunel. Conformal Prediction for Diffusion path. Under review, 2026
- Yuzhen Zhao, **Jiarong Fan**, Yating Liu. Plug-In Classification of Drift Functions in Diffusion Processes Using Neural Networks. arXiv:2602.02791, 2026

PROFESSIONAL EXPERIENCE

ENSIIE, Teaching Assistant in Statistics (Master's level), Evry, France	2026-Present
Teach TD/TP sessions in statistics for Master's students	
China Merchants Bank, AI Lab, Data Scientist, Beijing	2020-2023
Built Bayesian neural network and federated learning models for credit/income prediction and business analytics	
Beihang University, Teaching Assistant - Python for Data Analysis, Beijing	Spring 2020
Taught Python programming and data analysis (TD) to MBA students	
Microsoft Research Asia, Research Internship, Machine Learning Group, Beijing	2019-2020
Designed and constructed stock price prediction models, data engineering and algorithm implementation	
Baidu Inc. R&D Internship, Beijing,	2018-2019
Developed anti-fraud algorithms, including xgboost, graph mining, and neural networks	

ACADEMIC PROJECTS

Research at Sino-French Data Science Lab, supervised by Prof. Yu Lei	2017-2020
Master's Thesis: <i>Iterative reweighting learning for open-set label noise via clean samples</i>, proposing a novel algorithm for image classification in the presence of mislabeled data	
Research Project with EDF China	2019-2020
Indoor Temperature Prediction and Real-time Model for Solid Fuel Image Recognition	

SKILLS

Computer Skills: Python, Tableau, SQL, Shell, Linux, C++, Javascript, Matlab, LaTeX, Office
Languages: Chinese (Native), French (C1), English (C1), Japanese (Beginner)