

Yingjia Fu

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EDUCATION:

University of California, San Diego 2015.09-2021.06 (Expected)
PhD candidate in Mathematics
GPA: 3.98, Major Field: Probability and Stochastic Processes
MS in Statistics
Nankai University (National Talent Cultivation Program in Science) 2015.06
B.S. in Mathematics (Po-ling Class) GPA: 91.6/100 (Top 2)
University of California, Berkeley (Exchange Student) 2013.08-2013.12
GPA: 4.00, Mathematics

PUBLICATIONS:

- Yingjia Fu and Ruth J. Williams “Stability of a Subcritical Fluid Model for Fair Bandwidth Sharing with General File Size Distributions” *Stochastic Systems Volume 10 (2020), 251-273*
- Yingjia Fu and Ruth J. Williams "Asymptotic Behavior of a Critical Fluid Model for Bandwidth Sharing with General File Size Distributions" *Submitted*

TEACHING EXPERIENCE:

- Graduate Courses TA: Stochastic Processes, Stochastic Integral, Probability Theory
- Undergraduate Courses TA: Introduction to Computational Statistics, The Mathematics of Finance, Introduction to Probability, Foundations of Real Analysis

CONFERENCE ACTIVITY:

Invited Panelist

- UC San Diego TA student training Panelist 2018.10.25

Symposia or Seminars

- *On Relative Entropy*, Stochastic System Seminar, UCSD, California 2020.02.20
- Southern California Probability Symposium, USC, California 2018.12.08

Conferences

- “Stability of a Subcritical Fluid Model for Fair Bandwidth Sharing with General File Size Distributions” Seminar on Stochastic Processes 2020, Michigan State University 2020.03
- “Stability of a Subcritical Fluid Model for Fair Bandwidth Sharing with General File Size Distributions” (Poster) ITA Annual Workshop, San Diego 2020.02
- Stochastic Networks Conference, UC San Diego 2016.06

WORK EXPERIENCE:

Facebook Data Scientist Intern 2020.06-2020.09

- Evaluated Ads signal values through Granger Causal Model and productionized the model.
- Analyzed (weighted) empirical Bayesian CPA (Cost Per Action).
- Built Dashboard for signal feature values.

Experian (North America Data Lab) Data Scientist Intern 2019.06-2019.09

- Proposed an approach to embed Director and Officers (D&O) with companies by neural network (based on Node2Vec) to capture the hidden relationships among D&Os and the structural information of D&O work history graph and transaction graph.
- Feature collection: Built features on public companies (Fortune 1k) for a risk model based on financial performance and historical claims data and evaluated with univariate KS analysis.
- Model Adjustment: Applied Node2Vec algorithm on D&O graph for individuals within corporate structure and adjusted return, in-out hyperparameters and number of walks through cross validation.
- Evaluation Tasks: Link prediction, clustering and risk evaluation for Fortune 1k companies.

- Interactive Visualization: Utilized Neo4j to build an initial demo framework to present D&O graph.
- Tool development: Prototyped scraper in python for online data source.
- Built a data preprocessing and data quality checking tool for data from commercial insurance clients.

SKILLS:

- Machine Learning, Statistical Learning, Stochastic Networks, Deep Learning, Probability Modeling and Analysis, Time Series, Mathematical Finance
- Programming Languages: Python, R, SQL, Scala, MATLAB, Mathematica, C++, Cypher
- Piano: Level Ten in China (Top level in nonprofessional range)

HONORS:

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| • James B. Ax Graduate Fellowship, UCSD | 2020.03 |
| • 2018-19 Teaching Assistant Award from UCSD Mathematics Department | 2019.06 |
| • James B. Ax Graduate Fellowship from UCSD | 2015, 2016.09 |
| • IEEE Microsoft Young Fellow Scholarship (three out of about 340 students) | 2014.06 |
| • Merit Student Leader of Nankai University | 2013.10 |
| • Honorable Mention of International Mathematical Contest in Modeling | 2013.02 |