Jinrui Fang

CONTACT INFORMATION
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NYU Center for Data Science
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EDUCATION

New York University, New York, NY — May 2025 (Expected)
M.S., Data Science

University of Washington, Seattle, WA — Jun 2023
B.S., Informatics (Data Science concentration)

PEER-REVIEWED PUBLICATIONS

[1] Houzhang Fang, Lan Ding, Xiaolin Wang, Yi Chang, Luxin Yan, Li Liu, **Jinrui Fang**. SCINet: Spatial and Contrast Interactive Super-Resolution Assisted Infrared UAV Target Detection. *IEEE Transactions on Geoscience and Remote Sensing*

MANUSCRIPTS UNDER REVIEW

[1] **Jinrui Fang**, Melody S. Goodman, Marina M. Wizentier, Jemar R. Bather. Three Underused Statistical Methods in Social Epidemiology: Multiple Informant Models, Fractional Regression, and Restricted Mean Survival Time. *Revised and Resubmitted: American Journal of Epidemiology.*

[2] **Jinrui Fang**, Melody S. Goodman, Kimberly A. Kaphingst, Jin Yung Bae, Nina S Parikh, Diana R Silver, Jemar R. Bather. Sociodemographic Variation in Experiences with Medication Shortages among US Adults. *Under Review: American Journal of Preventive Medicine*

MANUSCRIPTS PREPARING

[1] **Jinrui Fang**, Diana R Silver, Sarah Cowan, Kimberly A. Kaphingst, Melody S. Goodman, Jemar R. Bather. Multiple Partner Fertility and Perceived Health in the United States

PRESENTATION

[1] **Jinrui Fang**, Melody S. Goodman, Kimberly A. Kaphingst, Jin Yung Bae, Nina S Parikh, Diana R Silver, Jemar R. Bather. Sociodemographic Variation in Experiences with Medication Shortages among US Adults. *Poster Presentation, American Statistical Association StatFest Conference. Columbia University, NY, 2024.*

[2] **Jinrui Fang**, Melody S. Goodman, Marina M. Wizentier, Jemar R. Bather. Three Underused Statistical Methods in Social Epidemiology: Multiple Informant Models, Fractional Regression, and Restricted Mean Survival Time. *Poster Presentation, Research Renaissance: Health Equity in Action. New York University, NY, 2024.*

RESEARCH PROJECT

Enhancing Large Language Models for Psychiatric Assessment
Advisors: Matteo Malgaroli, Kyunghyun Cho, Geoffrey Reed — Sep 2024 - Present

- Enhanced large language models for psychiatric assessment by creating a knowledge database from clinical vignettes and literature. Designed a retrieval system to assist diagnostic queries, evaluated diagnostic accuracy with retrieval-augmented generation, and developed web interfaces to increase access to mental health resources and reduce provider burden using linguistic-based symptom screening.

Crime-Related Court Report Classification Using Language Models
Advisors: Ott Toomet, Julie M Kafka — May 2024 - Present

- Develop a classification system using language models to identify firearm involvement in lengthy court crime reports, addressing the challenge of processing long, complex legal documents.

Capstone Project: Exploring Music Trends using Spotify Data
Advisor: Pascal Wallisch — Feb 2024 - May 2024

- Analyzed Spotify data to identify key factors influencing song popularity and genre characteristics. Utilized regression, clustering, and classification models for data analysis. Designed a collaborative filtering model using cosine similarity to create personalized mixtapes for 10,000 users.

Working Experience

Center for Anti-racism, Social Justice and Public Health, New York, NY

Research Assistant Feb 2024 - Present

- Collaborated on interdisciplinary research projects, significantly contributing to manuscript writing, conceptualization, methodology development, and data visualization. Led the preparation of original drafts, ensuring the presentation of research findings met high academic standards and demonstrated rigorous analytical thinking.

Hangzhou Sunyard Technology Co., Ltd., Hangzhou, China

Data Analyst Jun 2021 - Sep 2021

- Leveraged data analysis and market research to create user profiles and enhance app personalization, improving user experience through statistical modeling. Collaborated with cross-functional teams to translate data insights into actionable specifications, leading to the development and integration of over 5 key features aligned with business targets.

Teaching Experience

Advanced Methods in Data Science, University of Washington, WA

Teaching Assistant / Grader Mar 2023 - Jun 2023

- Assisted the instructor in developing an advanced data science curriculum for over 70 students, leading weekly lab sessions on machine learning, experimental design, causal inference, NLP, and deep learning. Prepared and graded problem sets and quizzes, offering constructive feedback.

Fundamental Skills for Data Science, University of Washington, WA

Teaching Assistant / Grader Sep 2022 - Dec 2022

- Assisted the instructor in developing R programming fundamentals for over 200 students, leading weekly lab sessions on data manipulation, analysis, and visualization. Guided over 25 student groups in developing interactive web applications using ShinyApp.

Leadership

Daxuesen Association, Online

Co-Founder Apr 2020 - Jan 2021

- Established an online platform to teach K-12 students in minoritized areas, leading a team of 10+ college volunteers. Developed resources for various subjects and connected 30+ underrepresented students with personalized study plans and mental health support, promoting educational equity.

Honors and Awards

Dean's List at University of Washington 2020, 2021, 2023

Skills

Programming Languages
Python, R, SQL, Java, JavaScript, Matlab
AI Framework
PyTorch, TensorFlow, Scikit, Keras, Pandas, Numpy, Matplotlib, Seaborn, Statsmodels
Data Visualization
Power BI, Tableau
Other
LaTeX, MATLAB