

Aric Cutuli

SCHOOL OF ENGINEERING AND APPLIED SCIENCES · COLUMBIA UNIVERSITY

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Education

Columbia University

New York, NY

MS FINANCIAL ENGINEERING

Sep 2022 - Dec 2023

- GPA: 3.7/4.0
- Concentration in Machine Learning

University of California, Los Angeles

Los Angeles, CA

BS MATHEMATICS/ECONOMICS

Sep 2019 - Jun 2022

- GPA: 3.9/4.0
- Specialization in Computing

Research Experience

Columbia Climate School

New York, NY

ADVISOR: PROF. UPMANU LALL & DR. MICHAEL PUMA

Feb 2023 - Present

- Bayesian hierarchical regression and machine learning to develop improved models of human migration flows

Professional Experience

Citigroup

New York, NY

QUANTITATIVE SUMMER ANALYST - EQUITIES CENTRAL RISK

Jun 2023 - Aug 2023

- Systematic order filtering using sentiment

Citigroup

New York, NY

QUANTITATIVE SUMMER ANALYST - AI INNOVATION LAB

Jun 2022 - Aug 2022

- Language model fine-tuning for news data classification

Consulting Startup

Remote

QUANTITATIVE DEVELOPER

Dec 2021 - May 2022

- Created derivative pricing and risk management tools for trading bots

Edelman Financial Engines

Santa Clara, CA

DATA ANALYST INTERN

Jun 2021 - Aug 2021

- Identification of fiduciary performance issues through statistical testing

Publications

IN PREP

A Bayesian Hierarchical Framework for Modeling Migration Flows. **Aric Cutuli**, Upmanu Lall, Michael Puma, Emile Esmaili, Rachata Muneeppeerakul. 2023.

TECHNICAL REPORTS

Separation Capacity of Randomly Initialized DNNs. **Aric Cutuli**, Harold Haodong Miao, Weitao Zhu. 2023.

Invited Talks

* *presenting contributor*

Aric Cutuli*, Upmanu Lall, Michael Puma, Emile Esmaili, Rachata Muneeppeerakul. 2023. A Bayesian Hierarchical Framework for Modeling Migration Flows. MURI Migration 2023 Annual Evaluation, Virtual.

Aric Cutuli*, Xia Li. 2022. Hawkes Processes in Finance. Directed Reading Program Student Colloquium, University of California, Los Angeles.

Teaching Experience _____

2023 **Algorithmic Trading**, Lead Teaching Assistant

Awards, Fellowships, & Grants _____

2019	University Grant , University of California, Los Angeles	\$ 45,000
	Legacy Scholar , Elks National Foundation	\$ 4,000
	IAHF Scholar , Italian American Heritage Foundation	\$ 1,000
	Most Valuable Student , California-Hawaii Elks Association	\$ 200

Coursework & Skills _____

COURSEWORK

Stochastic Calculus, Time Series, Optimization, Monte Carlo Simulations, Reinforcement Learning, Mathematics of Deep Learning, High Dimensional Machine Learning, Algorithms, Object-oriented Programming, Trading Systems, Quantitative Risk Management, Econometrics, Real Analysis, Numerical Analysis

SKILLS

Programming Languages

Python, C++, Java, Go

Technical Libraries

scikit-learn, NumPy, NumPyro, Keras, PyTorch, Hugging Face, statsmodels, CVXPY

Developer Tools

q/kdb+, SQL

Outreach & Professional Development _____

AFFILIATIONS AND SERVICE

2021-2022 **UCLA Quantitative Trading Club**, Cofounder

2021 **UCLA Directed Reading Program**, Reading Group Lead

PROFESSIONAL MEMBERSHIPS

QWAFAXNEW