Joachim Rillo

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EDUCATION

Columbia University, Columbia College

New York, NY

Bachelor of Arts in Economics-Statistics

May 2024

• **GPA:** 3.96/4.0

• Relevant Coursework: Field Experiments & ML (PhD), Machine Learning, Nonparametric Statistics, Advanced Econometrics, Linear Regression Models, Probability Theory, Statistical Inference, Microeconomics of Development, Resource-Constrained Decision-Making, Multivariable Calculus, Linear Algebra

RESEARCH EXPERIENCE

Yale School of Management

New Haven, CT

Predoctoral Fellow to Professor Stefano Giglio & Johannes Stroebel

July 2024 — Present

Columbia Department of Economics

New York, NY

Research Assistant to Professor Daniel Björkegren

Sep 2023 — Present

- Conducted literature review on the potential use of AI in bridging the educational inequality gap in developing countries.
- Developed threat clustering algorithm using GPT API in Python to analyze 50,000+ conversation queries and extract 10,000 threads. <u>Publication with mention at NeurIPS.</u>
- Spearheaded and presented algorithm to calculate OD matrices for local transport authority and World Bank officials to construct transport infrastructure for a commute system in a developing city.

Columbia Business School

New York, NY

Research Assistant to Professor Aneesh Raghunandan and Shivaram Rajgopal

May 2021 – Oct 2021

- Assisted in researching whether the type of media coverage holds firms accountable to create jobs in return for state aid. Publication with mention at the *Review of Accounting Studies*.
- Discovered that certain press releases incentivize compliance with job creation targets and presented findings in a conference of 100+ researchers.

Columbia Economics

New York, NY

Research Assistant to Professor David Weinstein

January 2021 — May 2021

- Assisted with researching how Japan broke out of the Malthusian Trap through innovation in the 20th century.
- Examined and improved the accuracy of over 1000 patent pages generated by OCR software to quantify the level of historical innovation in historical Japan.

TEACHING EXPERIENCE

Teaching Assistant, Columbia Department of Statistics

STAT3106: Applied Machine Learning

New York, NY

New York, NY

Spring 2024

Spring 2023

Help Room Teaching Assistant, Columbia Department of Statistics

<u>Undergraduate courses taught:</u>

STAT1001: Intro to Statistical Reasoning

STAT1101: Intro to Statistics

STAT1201: Calculus-based Intro to Statistics

Graduate courses taught:

STAT4203: Probability Theory STAT4204: Statistical Inference STAT4205: Linear Regression

ACADEMIC AWARDS AND HONORS

Cum Laude (Top 25% GPA in Class of 2024)	2024
Dean's List (3.6+ GPA for all eligible semesters)	2020—2024
Laidlaw Scholar Grant (1 of 25 first years, \$3000)	2021
Project SWAP, National Geographic Young Explorer's Grant (\$7000)	2020
IASAS Honors for Musical Excellence (Euphonium)	2017 - 2020
Scholastics Art and Writing Regional Gold Key (Asia)	2019
Top UNESCO-affiliated club in the Philippines	2019
Top 5 UNESCO-affiliated club in the Philippines	

SKILLS

Programming: Proficient in R, Stata, Python (pandas, numpy, sci-kitlearn, OpenAI API), LaTeX, Git **Languages:** English (fluent), Spanish (advanced), Tagalog (conversational), Japanese (basic)

INDUSTRY EXPERIENCE

Citigroup Sales & Trading

Manila, PH

Markets Summer Analyst

June 2023 — Aug 2023

- Built an inflation forecasting tool using a SARIMAX time series model in Python to inform future trading strategies; reduced trader forecasting time by 90% and outperformed later forecasts by Citi PHD economists for back-to-back months.
- Developed random forest exchange rate prediction model to identify 3 currency pairs and 2 cyclical factors that affect movements in the USDPHP exchange rate; distributed statistical analysis to Citi USDPHP traders across 4 countries.

Vriens & Partners Manila, PH

Summer Analyst

July 2022 — Sep 2022

- Worked with a healthcare NGO to implement dengue prevention; analyzed national data on 1,488 municipalities and developed a weighted average index to determine 32 key local government units for partnership and implementation.
- Analyzed data on energy supply and demand trends in the Philippines for a renewable energy client across different energy sources; identified untapped opportunities for wind energy and presented findings to 30 consultants in a regional briefer.

Coda.io New York, NY

Growth Fellow

Jan 2022 — May 2022

- Identified key distribution channels for a series D startup integrating documents and spreadsheets into 1 platform; boosted student engagement by 5000+ users, leading to the inclusion of student-targeted documents in featured templates.
- Analyzed survey data on productivity issues among Columbia students and built an automated CRM networking template, Cornell Notes template, and automated task management document; accumulated 10,000+ views and 50+ document copies.

LEADERSHIP

Columbia UNICEF New York, NY

Treasurer and Fundraising Committee Head

Oct 2020 — May 2022

- Managed funds of 3,000 USD for children's rights awareness campaigns and non-profit panels; organized new annual networking events with professionals from leading nonprofits and increased active club membership by over 150%.
- Directed fundraising efforts of a 10-person committee; cumulatively raised over 5,000 USD for UNICEF USA.

Sustainable Waste Action Program Project (Project SWAP)

Manila, PH

Public Relations Executive and Co-Founder

June 2020 - Jan 2021

- Awarded National Geographic Young Explorer Project grant of 7,000 USD to train 19 youth ambassadors across 14 regions in the Philippines in plastic upcycling; helped over 30 communities to implement more sustainable plastic waste habits.
- Forged partnerships with over 15 nonprofit organizations, including Greenpeace Philippines; led to over 75,000 new engagements across Instagram and Facebook and increased follower count by over 3,000 users.

ADDITIONAL INFORMATION

Extracurricular activities: Alpha Kappa Psi Business Fraternity, Columbia UNICEF (previous Treasurer and Fundraising Head), Liga Filipina (previous International Student Representative)

Interests: euphonium, anime, Super Smash Bros Ultimate, reading, type-racer