

Miguel Rivera-Lanas

Data scientist/engineer with 4 years experience in investment management. Interested in research roles focusing on ML/AI bias and computational social science. Primarily focused on empirical methods to study quantitative and social effects of disinformation propagation and content moderation systems.

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EXPERIENCE

Data Scientist / Engineer — Point72, NYC, NY

September 2019 - Present

- Sept 2019 to Aug. 2020, I was part of a research and learning group, investigating novel applications of data science to prove use cases for alternative data sets as part of the investment process.
- In Sept. 2020, I joined an 8 person, \$X billion investment team, where I manage all data science and engineering projects.
- Implement statistical descriptive modeling, preprocessing, feature engineering, and forecasting over a diverse range of data sets related to oil well production, retail consumer trends, and other sectors.
- Analyze sector exposure to risk factors, inter sector correlations, and build systematic strategy backtesting framework
- Build scalable and robust cloud based event-driven ETL architecture for delivering continuous reporting of data products

Research Associate, Fixed Income — AllianceBernstein, NYC, NY

June 2016 - August 2016, June 2017 - August 2019

- Rotations as research associate for macro economics, quantitative research, and portfolio strategy technology teams
- Developed and maintained ETL, preprocessing, and reporting for novel liquidity signals from live order-book data, utilized by traders to better assess supply and demand conditions for specific parts of the market.

Research Assistant — Wharton Management Dep., Philadelphia, PA

September 2015 - May 2016

- Compiled original research on Canadian and Brazilian oil drilling infrastructure projects as part of a long term study focusing on project management best-practices. Used LexisNexis for primary source research on effects of macroeconomic trends and operational decisions.

EDUCATION

University of Pennsylvania, Philadelphia, PA — B.A., Cum Laude

August 2013 - May 2017

Major: Economics, **Minors(s):** Statistics, International Relations

Clubs:

- **Check One: Board Member.** Student organization providing a space for discussions about personal and societal experiences about race and mixed-heritage backgrounds.
- **Penn Journal of Economics: Editorial Committee.** (PJE) is a semi-annual, peer-reviewed publication of honors theses and other academic projects for undergraduates and faculty.

CORE COMPETENCIES

Scripting: Python, Scala, R

Development: Git, Airflow, Docker

Cloud: AWS (S3, EC2, RDS, Lambda, SNS, Glue Jobs)

Databases: PostgreSQL, MongoDB

ML: Sklearn, Tensorflow, SpaCy

Data Manipulation: Pandas, Numpy, SciPy, BeautifulSoup, Spark, Tidyverse

Web Dashboard: Plotly Dash

INTERESTS

Computational Social Science,

Misinformation,

Fairness/Bias in ML/AI

PERSONAL PROJECTS

Visit www.rivera-lanasm.com/post/

• **Logic/Probability Puzzles:**

- Logic and math puzzles solved with analytical and probabilistic methods. Solutions coded primarily in **Scala**.

VOLUNTEERING

• **Statisticians without Borders**

- Consulted NGO over 10 weeks as part of a volunteer team

- Implemented data pipelines and a web dashboard tracking epidemiological model results related to COVID-19 spread in various cities in India.

LANGUAGES

English (Fluent), **Spanish** (Fluent),

French (Working Proficiency)