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 use cases for using novel data sets, including credit-card transaction panel data, website traffic, cell-phone geolocation panels, and others for discovering trends related to fundamental KPIs for companies.
- In Sept. 2020, I joined an investment team with 8 sector analysts, 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: PostgresSQL, MongoDB
ML: Sklearn, Tensorflow, SpaCy
Data Manipulation: Pandas, Numpy, SciPy, BeautifulSoup, Spark, Tidyverse
Web Dashboard: Plotly Dash

INTERESTS
Computational Social Science,
Misinformation,
Fairness and 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**
- Nov. 2020 - March 2021
- Consulted NGO over 15 weeks as part of a volunteer team
- Implemented data pipelines tracking COVID-19 epidemiological model results for use by municipal health organizations in India.

LANGUAGES
English (Fluent), **Spanish** (Fluent), **French** (Working Proficiency)