

# 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 group, investigating novel data sets, including credit-card transaction data and others, for evaluating trends and statistical relationships to company fundamental KPIs.
- 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.
- Build systematic strategy backtesting and risk analysis frameworks
- 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.

## VOLUNTEERING

**Volunteer Developer** — **Statisticians without Borders (SWB)**  
November 2020 - March 2021

- Worked as a data engineer over 15 weeks as part of a SWB volunteer team on behalf of the Indian non-profit, India Excellence Forum (IEF)
- Our team achieved our objective to develop a web dashboard for evaluating COVID-19 related epidemiological model results to assist municipal health organizations in India.

## 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 discussion space for personal and societal experiences involving 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 and Bias in ML/AI

## PERSONAL PROJECTS

**Visit** [www.rivera-lanasm.com/post/](http://www.rivera-lanasm.com/post/)  
• **Logic/Probability Puzzles:**  
- Logic and math puzzles solved with analytical and probabilistic methods. Solutions coded primarily in **Scala**.

## LANGUAGES

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