# R. Paul Fornia

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Paul is an experienced software engineer, data scientist, and team leader. He specializes in building, deploying, and monitoring machine learning and deep learning models at scale, with a focus on value and impact. He has served many industries, including tech, finance, government, and non-profit.

#### **WORK EXPERIENCE**

## Meta (Facebook) – Software Engineer, Machine Learning (2021 – Present)

- Owner of large feature (100M+ daily impressions) that supports the FB group ecosystem by providing personalized recommendations of lesser-known groups
- The feature increases the number of FB Groups with sustainable levels of engagement by hundreds of thousands (my contributions in 2022H1 increased this effect by 5%)
- Increased click rate by 10%
- Decreased latency by tens of milliseconds

## FINRA (Contractor via Tential) – Data Scientist (2020 – 2021)

- Developed and tested novel Deep Learning market surveillance models using Tensorflow/Keras
- Extracted useful, model-ready datasets using PySpark
- Queried from petabytes of data approximately 100B records per day
- Focused on deployment, preparing pipeline for highly scaled production environment
- Built beautiful, interactive visualizations to display model output for business users

### **TPC Energy Fund** – Lead Data Scientist (2020)

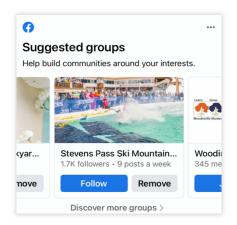
- Provided highly accurate forecasts of returns and volatility of the wholesale power market using machine learning
- Optimized portfolios across thousands of trades using industry best-practices
- Implemented robust backtesting systems to measure performance and risk
- Customized industry standard solutions to fit nuanced financial situations

# **DataRobot** – Customer Facing Data Scientist (2019 – 2020)

- Provided pro bono services to social impact organizations under AI for Good Program
- Led five high-value accounts as primary Data Scientist
- Scoped and developed machine learning use cases for maximum ROI and impact
- Executed machine learning projects from framing to modeling to deployment
- Supported sales team by demoing DataRobot to executives and at trade shows
- Represented the AI For Good program externally in media interviews

### **Deloitte** – Senior Consultant and Data Scientist (2014 – 2019)

- Developed Machine Learning, Optimization, Recommenders, and UI solutions
- Led team of four full-time consultants and data scientists
- Managed complex software development lifecycle
- Developed and led internal and external trainings in Data Science



# Federal Reserve Board of Governors – Senior Research Assistant (2012 – 2014)

Financial Studies | Research & Statistics

- Contributed analysis to support original policy and academic research
- Managed data sets, models, and visualizations

#### **EDUCATION**

# Johns Hopkins University (Graduated 2020)

MS – Computer Science

# **University of Colorado Boulder** (Graduated 2012)

BA - Economics - Magna cum Laude

BS – Applied Mathematics—Computational Economics Emphasis

#### **AWARDS and CERTIFICATIONS**

- Kaggle Highest Rank: 759th/180K globally
  Jane Street Market Prediction ML Competition Silver Medal top 1% (2021)
  Microsoft Indoor Navigation ML Competition Silver Medal top 3% (2021)
- Amazon Web Services Certified Cloud Practitioner (2018)
- University of Washington (via Coursera) Specialization in Machine Learning (2017)
- Johns Hopkins University (via Coursera) Specialization in Data Science (2015)
- The George Washington University Graduate Certificate in Financial Math (2014)

#### **PUBLICATIONS**

Cheong, S.A., **Fornia, R.P.,** Lee, G.H.T., Kok, J.L., Yim, W.S., Xu, D.Y. and Zhang, Y., 2012. The Japanese economy in crises: A time series segmentation study. *Economics*, 6(1).