Geoffrey T. Perrin

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SUMMARY:

Extroverted data scientist focused on using a combination of machine learning, geospatial analysis, data viz, and (general) data science to try to solve our most intractable urban problems.

Specialties: Machine Learning; git; thinking about equity; Random Forest Regression / Classification; Neural Networks / DNN, CNN, and RNN; Image Processing / CV; Geospatial Analysis; Crowd Sourced Data Collection; Time Series Analysis; NLP; Big Data; SQL / databases; AWS; Happy Hours.

TECHNICAL SKILLS:

Languages (in order of proficiency): English, Spanish, German
Programing Languages: Python, R, SAS, Stata
Libraries / Tools: Pandas, GeoPandas, NumPy, NLTK, Jupyter Suite, Tableau, ArcGIS, Alteryx, Amazon EC2, PostgreSQL, Amazon RDS, Computer Vision (OpenCV), Deep Learning (TensorFlow, Keras), PySpark

EXPERIENCE:

- **Urbint** Remote / New York City, NY
  Machine Learning Engineer March 2020 – Present
  - Writing production code / building ML models with a focus on energy utilities and their gas assets - extremely collaborative (agile) process, saving lives and utility companies millions of dollars due to significant reduction in number of incidents / gas explosions - up to 25% recall for top 1%.
- **Ford Motor Company, Smart Mobility** Detroit, MI
  Data Scientist April 2018 – March 2020
  - Built analytics algorithms, tools, APIs, and consulting expertise to support Ford Smart Mobility products and programs, such as an accessibility tool to support Spin Scooters, AV initiatives, and the City:One Challenges in Mexico City, Miami, Pittsburgh, Austin, and Detroit.
- **Bloomberg Associates** New York City, NY
  Data Scientist August 2017 – April 2018
  - Built the city of Bogotá dashboards visualizing citizen complaint data - presented results in Spanish in Bogotá, and English at Bloomberg's D4GX Conference.
  - Using NLP and sentiment analysis to improve classification of complaint data for Bogotá.
- **NYU Center for Urban Science and Progress** New York City, NY
  Graduate Student / Graduate Research Assistant MacArthur Fellow September 2016 – August 2017
  - Improved the granularity of predicting household waste generation for the Department of Sanitation New York (DSNY) by building a neural network model with an R-squared nearing 0.87.
  - Capstone project reduces city costs by 95% in assessing bike lane quality. Accomplished through computer vision algorithms, crowd sourced data collection, and cloud computing.
- **Detroit Land Bank Authority** Detroit, MI
  Bloomberg Fellow July 2016 – May 2017
  - Reduced foreclosed home pipeline sorting time by 95% by building random forest classification model, which predicts whether or not a home is occupied, with a ≈0.9 AUC score.
- **Levi Strauss & Co.** San Francisco, CA
  Senior Analyst July 2013 – July 2016
  - Saved LS&Co. $5 million due to stockouts through custom built forecasting models in R

EDUCATION:

- **Masters of Science in Urban Informatics** August 2017
  New York University – New York, NY
- **Bachelor of Science in Economics, Financial Mathematics** May 2009
  University of Michigan – Ann Arbor, MI