

Summary

I'm a data scientist and engineer with academic training in mathematics and theoretical physics. I enjoy learning, solving problems, and working with people.

Experience

Lead Data Scientist – Reonomy

Oct 2014 – Present, NYC

- Created a research tool for commercial real estate market participants that maps a given individual or organization's name to a comprehensive set of associated contact information, people, holding companies, properties, and financial metrics.
- Implementation included self-built hierarchical string clustering Python library, Elasticsearch backend, and Swagger-compliant RESTful API. Results generated from an array of fragmented and messy datasets.
- Helped other internal teams to address their own data problems simply and effectively. Taught SQL to non-technical colleagues, performed paired exploratory data analysis, and built intuitive data tools for others to use.

Data Scientist – Dstillery

July 2013 – Sept 2014, NYC

- Reimplemented data pipeline for core ad-targeting model in Python. Simplified workflow, reduced computational complexity, increased data throughput 100x, and improved model performance by 15% AUC.
- Created experimental framework using Hive to prototype and evaluate strategies for cross-device retargeting. Performed proof-of-concept study that became the basis of company's mobile-to-desktop retargeting capability.
- Developed interactive visualizations using D3 that became central to business development efforts. Also used for sales, marketing, fundraising, board meetings, and internally.

Data Science Instructor & Course Designer – General Assembly

Mar 2013 – Mar 2014, NYC

- Designed the original curriculum for General Assembly's data science course that has been built upon and expanded to cities around the world. Taught two sessions of the course in spring 2013 and winter 2013-14.
- Curriculum centered on concepts and techniques from statistics and machine learning using Python, pandas, and scikit-learn. Also includes an introduction to Unix, NoSQL, MapReduce, and D3. Emphasis placed on practical tools and problem solving skills.

Data Scientist – EveryScreen Media

Oct 2012 – July 2013, NYC

- Built data pipeline for processing mobile ad impressions using Python, Redis, and Elastic MapReduce. Scaled capacity up to billions of impressions per day.
- Led discussions with prospective buyers on data processing methodology and implementation. Created written documentation aimed at non-specialists to support acquisition process.

Financial Engineer, Risk Management Software – Thomson Reuters

Jan 2011 – Oct 2012, NYC

- Advised clients and stakeholders on modeling and implementation issues related to pricing and hedging of financial derivatives.

Associate, Credit Derivatives Arbitrage Trading – BNP Paribas

Jan 2007 – Aug 2008, NYC

- Proprietary trader focused on model-driven relative value strategies in credit derivatives and related markets. Implemented pricing models, researched and tested trade ideas, executed exchange-based and OTC trades.

Analyst Intern, Risk Management – Soros Fund Management

Mar 2006 – Aug 2006, NYC

- Performed data analysis and summarized quantitative information for portfolio managers of multi-billion dollar hedge fund.

Education

MSc, Theoretical Physics (awarded with Distinction)
King's College London

Sep 2008 – Nov 2009, London, UK

MS, Financial Mathematics
Courant Institute of Mathematical Sciences, New York University

Sep 2005 – Dec 2006, NYC

Summer school, MBA program
London School of Economics

Jun 2001 – Aug 2001, London, UK

BS, Mathematics/Economics
University of California, Los Angeles

Sep 2000 – Jun 2005, LA

Other Interests

Reading, science, music, travel, the outdoors.