John Bentley

Trained data scientist with a Yale Math and Philosophy degree and 7 years of coding experience, 3 years of which were machine-learning focused. Mission-driven team-player who is enthusiastic about driving impact by combining modern tools with a deep understanding of industry issues.

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WORK EXPERIENCE

Data Scientist Teaching Assistant

NYC Data Science Academy

New York, NY — 01/2019 – Present

- Lead coding courses on techniques and tools including machine learning, web scraping, R, Python, Git, and Docker.
- Design supplementary materials to teach Bash usage, advanced SQL, and statistical theory.

Financial Analyst

Brownson, Rehmus & Foxworth

Menlo Park, CA — 07/2017 – 12/2018

- Employed modern portfolio theory to fit investment recommendations to client needs. Chief analyst responsible for re-derivation of practice-wide fixed-income targets due to shifts in corporate bond market. Reduced credit risk exposure by an average of 50% on $3 billion in advised-upon assets.
- Built tools using SQL database of portfolio returns, R, Excel, and VBA. Cut time for one critical report from over an hour per deliverable to five minutes.
- Assisted in management of $2 billion in client portfolios as senior analyst to team of two analysts and one support professional.
- Planned and led segments of meetings and addressed questions from clients. Primary contact for certain clients.

Flight Analyst Intern

NASA Goddard Space Flight Center

Greenbelt, MD — 05/2016 – 01/2017

- Researched and customized cutting-edge algorithms for magnetometer calibration that remain in use.
- Processed terabytes of magnetometer time-series data using PCA and regression techniques to find magnetic waves.
- Determined statistical significance of unexpected readings from onboard sensors. Findings helped save thousands by discouraging further experimentation.
- First author: Bentley J, Chu D, Loto'aniu P, Redmon R, Rich F, Sheppard D. Exploring the use of Alfvén waves in magnetometer calibration at geosynchronous orbit. American Geophysical Union. 2016.

Research Assistant

Yale Department of Political Science

New Haven, CT — 06/2014 – 10/2014

- Estimated economic cost of power-shifts associated with nuclear-weapons acquisition.
- Researcher credit: Debs A, Monteiro N. Nuclear Politics: The Strategic Causes of Proliferation. Cambridge University Press. 2016.

EDUCATION

Data Scientist Certification

NYC Data Science Academy

New York, NY — 09/2018 – 12/2018

- Constructed explanatory models using ARIMA techniques and spectral analysis. Verified effectiveness of crime reduction initiative affecting city of 130,000.
- Built ensemble model using KNN, Lasso, and Gradient Boosting to predict home sale prices. Achieved .126 root mean squared logarithmic error.
- Created R Shiny webapp to model data on extra-solar planets, including Flash visualization of orbital paths.
- Scraped data from popular project-hosting hub using Python and analyzed success factors using correlation analysis and regression.

B.A. with Distinction: Mathematics and Philosophy

Yale University

GPA: 3.65 (Major 3.82)

New Haven, CT — 08/2013 – 05/2017

- Data Mining and Machine Learning
- Introduction to Computer Science
- Complex Analysis
- Linear Algebra
- Multivariable Calculus
- Computability and Logic
- Intermediate Microeconomics
- Set Theory

SKILLS

- Machine Learning: Generalized Linear Regression, Trees, Ensembles, PCA, SVMs, Cluster Analysis, Neural Networks, Time-Series Analysis
- Programming: Python (7 years), R (2 years), SQL (1 year), Bash (1 year), MATLAB (3 years), Java (7 years)
- Data Engineering: Spark, AWS, Hadoop
- Analysis: Statistics, Financial Modeling, Signal Processing, Economic and Political Research
- Communications: Client-Relations, Team-Coordination, Presentation
- Project Management: Staging, Resource-Management
- Leadership: Eagle Scout, Yale Freshman Counselor
- Music: Banjo, Guitar