
(417) 413-9525 • johnsumnerbentley@gmail.com • Brooklyn, NY

Experience

JUN '21 - PRESENT

Lead Quantitative Researcher | Betterment, New York, NY

- Write and maintain production code that powers Betterment's advice and investment management.
- Conduct in-depth research to optimize Betterment's asset allocation across both traditional assets and cryptocurrencies. Evaluate potential new methods such as hierarchical risk parity.
- Use QuantConnect and Monte Carlo methods to test performance of portfolio strategies and trading parameters such as tax-loss harvesting triggers.

APR '18 - JUN '21

Lead Data Analyst | Betterment, New York, NY

- Built an in-house Bayesian A/B testing analysis tool from theory to deployment. Researched and developed new significance test for highly idiosyncratic data.
- Constructed a random forest model to automatically surface large withdrawal risks for automated CRM targeting.
- Recommended product changes to increase feature adoption as the lead analyst for all post-signup products.

JUL '17 - DEC '18

Financial Analyst | Brownson, Rehms & Foxworth, Menlo Park, CA

- Manage portfolios for wealthy families including billionaires using modern portfolio theory. Lead analyst for \$5B in assets.
- Planned and led client meetings. Chief point of contact for several clients.
- Built automated reporting to improve efficiency. Cut refresh time for one report from several hours to ten minutes.

JAN '18 - MAR '18

Teaching Assistant | NYC Data Science Academy, New York, NY

- Led courses on data science skills including machine learning, statistics, Python, R, SQL, and Git.

Education

MAY '17

Bachelor Of Arts (B.A.) In Mathematics And Philosophy

Yale University, New Haven, CT GPA 3.67

Additional Skills

Machine Learning (randomforest, PCA, neural networks, time series)

Programming (Python, R, Julia, Bash, Git, AWS)

Financial Modeling (Monte Carlo methods, portfolio optimization)

Data Visualization (ggplot, Excel, PowerPoint)

Publications

- Bentley, J. (2020). Self-Aware Science Creation. American Book Review 42(1), 15-16. doi:10.1353/abr.2020.0120.
- Bentley J, Chu D, Loto'aniu P, Redmon R, Rich F, Sheppard D. (2016). Exploring the Use of Alfvén Waves in Magnetometer Calibration at Geosynchronous Orbit. AGU.