# JOHN BENTLEY

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#### **EXPERIENCE**

## Betterment, New York, NY

Quantitative Researcher, Jun 2021 - Present

- Built and deployed a random forest model to automatically surface large withdrawal risks for automated CRM targeting.
- With senior engineers, led transition to new data pipeline to feed portfolio data into production which reduced engineering hours required for portfolio updates by 50%.
- Currently developing and testing algorithm to analyze new cryptocurrency ETFs to determine suitable candidates for tax-loss harvesting.
- Maintain server that runs research and data science code using R, Python and Julia and train new team members on coding best practices.

Data Analyst, Apr 2018 - Jun 2021

- Worked with engineers to build an in-house A/B testing analysis tool and owned the code after deployment. Consulted on the design and interpretation of all experiments.
- Researched and developed new significance test for highly idiosyncratic data.
- Used data science techniques to analyze user behavior and recommend product changes to increase feature adoption as the lead analyst for all post-signup products.

## Brownson, Rehmus & Foxworth, Menlo Park, CA

Financial Analyst, Jul 2017 - Dec 2018

- Helped to build and 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.

## NYC Data Science Academy, New York, NY

Teaching Assistant, Jan 2018 - Mar 2018

• Led courses on data science skills including machine learning, statistics, Python, R, SQL, DevOps and version control.

## NASA, Greenbelt, MD

Flight Analyst Intern, May 2016 - Jan 2017

• Wrote programs that use principal component analysis to search for certain magnetohydrodynamic waves at geostationary altitude and presented results with a poster at the American Geophysical Union.

# **EDUCATION**

Yale University, New Haven, CT

Bachelor of Arts (B.A.) Mathematics and Philosophy (May 2017)

- 3.66 GPA with Distinction in the Major
- Research assistant for Professor Alexandre Debs
- Leadership council for Yale Outdoors and Climbing clubs

#### ADDITIONAL SKILLS

- Machine Learning (randomforest, PCA, neural networks, regression, boosting, time series techniques)
- 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. American Geophysical Union.