

Tony Owens

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EDUCATION

Princeton University – Princeton, NJ

Graduating: May 2024

B.S.E. in Computer Science and Certificates in Statistics and Machine Learning and Spanish Language and Culture (3.07 GPA)

Relevant Coursework: Probability Theory, Statistics, AI and Machine Learning, Relational Databases, Algorithms and Data Structures

SKILLS

- **Programming Languages:** Python, Javascript, ReactJS, NodeJS, R/R Shiny, SQL, C, C++, Java, Go, Rust
- **Tools:** Git, Github, Excel, Tableau, OpenGL, BigQuery, AWS, Azure, Pandas, PyTorch, TensorFlow, Notion, MS Suite
- **Technical Skills:** Machine Learning, Web Scraping, Statistical Testing, Database Management, Predictive Modeling, APIs
- **Languages:** English (Native), Spanish (Fluent)

PROJECTS

Undergraduate Thesis Project

May 2024 (Expected Completion Date)

- Acquire and parse Retrosheet data from past MLB seasons with Python and R.
- Develop a Python Markov Model for simulating baseball games.
- Build out an interactive front end with ReactJS and Flask to visualize the results of the simulations.

Predict the Results of NBA Games

September 2022 – December 2022

- Collected seasonal and game by game NBA statistics with Python web scraping from BasketballReference and RealGm.
- Constructed several predictive machine learning models in Python and R and achieved a peak accuracy of 69.5%.
- Wrote a 25-page paper detailing my findings and presented my results to an audience of students and professors.

EXPERIENCE

Princeton University, Undergraduate Course Assistant – Princeton, NJ

September 2023 – Present

- Develop instructional materials for students in Python programming, Web scraping, and Machine Learning best practices.
- Hold weekly office hours for students to help debug their code, and brainstorm ideas for their semester long projects.

Philadelphia Phillies, Associate Quantitative Analyst – Philadelphia, PA

May 2023 – September 2023

- Develop and productionize a mixed effects model for calibration of player tracking data.
- Attended biweekly meetings discussing various topics in baseball research, such as seam-shifted wake and use of sweepers.

Princeton Baseball Analytics Team, Analytics Intern – Princeton, NJ

November 2022 – Present

- Build out R Shiny apps to create interactive visualizations for the coaches.
- Integrated Python and Excel to automatically generate scouting reports for upcoming opponents.
- Create and maintain our internal database of TrackMan data using MySQL hosted on Azure.

ACTIVITIES

Daily Princetonian, Sports Contributor

February 2023 – Present

- Write game recaps and predictions for the sports section of the Daily Princetonian campus newspaper.

Princeton Data Science Club, Member

December 2021 – Present

- Compete on behalf of Princeton in data science related competitions.