

# Tony Owens

to5@princeton.edu | 848-220-4845 | [linkedin.com/in/tonyowensjr](https://www.linkedin.com/in/tonyowensjr) | [github.com/tonyowensjr](https://github.com/tonyowensjr)

## 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, R/R Shiny, SQL, JavaScript C, C++, Java, Go, Rust
- **Tools:** Git, GitHub, Excel, Tableau, ReactJS, 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%.

## 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

- Developed and productionized 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 automate the generation of scouting reports for upcoming opponents.
- Create and maintain our MySQL database hosted with Azure, which contains our Trackman data.

## 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.