

# NICOLAS FERNANDEZ BAIGUN

 [linkedin.com/in/nicofb](https://www.linkedin.com/in/nicofb)  [github.com/nico-fb](https://github.com/nico-fb)  [nicofb.me/](https://nicofb.me/)

## Education

### Brown University

Sep. 2022 – May 2026

*Bachelor of Science in Computer Science and Statistics, 4.0 GPA*

*Providence, RI*

Relevant Coursework: Introduction to Computer Systems\*, Introduction to Software Engineering\*, Principles of Biostatistics and Data Analysis\*, Hands-on Data Science\*, Program Design with Data Structures and Algorithms, Introduction to Object-Oriented Programming and Computer Science, Using Big Data to Solve Economic and Social Problems, Introduction to Discrete Structures and Probability, Multivariable Calculus, Linear Algebra, Statistical Inference I

### American Heritage School

Sep. 2018 – May 2022

*High School Diploma, 5.72 GPA*

*Plantation, FL*

Relevant Awards: National Merit Finalist, AP Scholar with Distinction, High Honors Recognition every semester

## Professional Development Experience

### Software Engineer Intern

May 2023 – Present

*Moderately Media LLC*

*Remote*

- Collaborated with other software engineers to develop, prototype, and release cutting-edge AI software
- Debugged and finalized a website/Twitter blog that scrapes RSS feeds and summarizes government news from various sources, utilizing Python libraries such as Pandas and Requests, as well as APIs including Tweepy, OpenAI, and Ujebu
- Independently developed a web scraper for a client that uses the Asyncio, Pypeteer, and BeautifulSoup libraries to extract high school sports scores from dynamic websites, providing accurate and up-to-date results for any specified date
- Currently taking the lead in the design phase of a Kivy app that helps clients to generate, rate, and combine article headlines effortlessly, ultimately delivering a customized solution that meets their specific preferences

### Test Writer (Freelance)

May 2022 – September 2022

*Florida Association of Mu Alpha Theta*

*Remote*

- Crafted the Statistics Team Round and Solutions for the 2024 Florida Association of Mu Alpha Theta States convention, aligning with curriculum guidelines while injecting creativity to ensure an enjoyable experience for participants
- Ensured quality and accuracy by leveraging personal experience as a former participant, while verifying answers with a trusted colleague to validate the provided solutions

### Student Teacher

August 2019 – April 2022

*American Heritage School*

*Plantation, FL*

- Developed and implemented a rigorous curriculum for Mu Alpha Theta students in grades 4-6, effectively preparing them for regional and state competitions
- Crafted and delivered an advanced Statistics curriculum to my students, resulting in a consistent placement within the top 2 teams at the state level throughout the academic year
- Designed and administered comprehensive weekly assessments to gauge student comprehension/progress, leveraging the insights gained to tailor instructional approaches and optimize academic performance

## Projects

### Arbitrage Finder | *Python, SQL, Selenium, BeautifulSoup, SQLite*

- Developed a web scraping program utilizing Selenium and BeautifulSoup to extract odds data for multiple sports from various sports betting websites
- Designed an efficient SQLite database structure to store standardized event information and corresponding odds data
- Created a SQL function to identify arbitrage opportunities by comparing event odds across bookmakers and calculating potential profits

### Custom Search Engine | *Python*

- Processed a wiki file in XML format, extracting titles, IDs, and text to populate data structures for analysis
- Calculated term importance using the Term Frequency-Inverse Document Frequency (tf-idf) algorithm, incorporating word frequency and document relevance metrics
- Integrated PageRank algorithm to determine page authority based on link frequency, combining it with tf-idf values to assess document relevance

Find more projects on my [Personal Website](#) or [GitHub](#)

## Technical Skills & Interests

**Programming Languages:** Python, Java, C#, SQL, JavaScript, HTML/CSS, R, Lean

**Technologies:** VSCode, IntelliJ, GitHub, APIs, Unity, Docker, SQLite, Kivy, GitPod, LaTeX, Google Suite

**Interests:** Alto saxophone, pickleball, scuba diving, basketball, wood carving, cryptography, cooking, board games

**Languages:** Spanish: Native, English: Native

## Leadership Experience

**Saxophone section leader** | *American Heritage School Band*

August 2021 – May 2022

**Founder and Puzzle Writer** | *Puzzlehunt by the Puzzling Elves*

April 2021 – June 2021

**English Teacher** | *Centro Educativo Cabuya*

June 2017, 2018, 2019