Nicolas Fernandez Baigun

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Education

Brown University   **Sep. 2022 – May 2026**
Bachelor of Science in Computer Science and Statistics, 4.0 GPA   *Providence, RI*
Relevant Coursework: Intro to Computer Systems, Program Design with Data Structures and Algorithms, Intro to Object-Oriented Programming, Computational Probability and Statistics, Principles of Biostatistics and Data Analysis, Using Big Data to Solve Economic and Social Problems, Intro 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 – September 2023**
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 Ujeebu
- Independently developed a web scraper for a client that uses the Asyncio, Pyppeteer, and Beautiful Soup libraries to extract high school sports scores from dynamic websites, providing accurate and up-to-date results for any specified date
- Led the design and development 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, Beautiful Soup, SQLite*
- Developed a web scraping program utilizing Selenium and Beautiful Soup 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, C#, R, JavaScript, HTML/CSS
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**