Camilo Becerra

69 Brown St, Box #4376 Providence, RI 02912 | Phone: (401) 636-4082 | camilo_becerra@brown.edu | https://bit.ly/camilo-becerra-portfolio

EDUCATION

Brown University, *B.Sc. Applied Mathematics-Computer Science*   Providence, United States | **Expected Graduation May 2027**
- 4.0/4.0 GPA
- Relevant Coursework**:** *Computer Vision, Fundamentals of Computer Systems, Linear Algebra, Multivariable Calculus.*

WORK EXPERIENCE

National Student Leadership Conference, *Team & Assistant Team Advisor* Johns Hopkins University, USA | June 2024 – July 2024
- Led lectures, labs, and workshops in deep learning, regression and classification algorithms, data analysis, data presentation, data cleaning, and other topics in AI and data science to groups of up to 30+ students at a time.
- Mentored students in the development of projects in AI and data science, namely developing machine learning models or analyzing large datasets to extract insights.
- Staffed 4 summer sessions, receiving over 800 students throughout the whole summer, with around 150 students in my specific programs.

RESEARCH EXPERIENCE

Universidad de Los Andes, *Biomedical Engineering Research Assistant*   Bogota, Colombia | June 2022 – July 2022
- Participated in a research project that developed a machine learning model that could detect both tissue type and cancer presence from RNA transcriptomic data with 94.1% balanced accuracy, trained with TCGA and GTEx databases, for a combined total of around 27,000 RNA samples.
- Aided in the writing process of the paper "CanDLE: Illuminating Biases in Transcriptomic Pan-Cancer Diagnosis," which outlined the research process, by collecting data from the state-of-the-art and producing key graphics.

LEADERSHIP EXPERIENCE

Colombian Student Association @ Brown University, *Executive Board Member*   Providence, RI | January 2024 – Present
- Organize cultural, social, and academic activities and trips centered around Colombian culture, open to all students.
- Serve as financial signatory for the organization, ensuring compliance with the rules that govern the association's finances.

Colegio Los Nogales, *House Captain*   Bogotá, Colombia | June 2022 – June 2023
- Elected as one of six house captains in my graduating class by a board composed of the school principal, the previous house captains, and other executives and teachers in the school.
- Organized merchandise sales to raise 3 million Colombian pesos to fund programs for school's low-income students.
- Organized and directed 15+ sports, artistic, cultural, and academic events ranging from 10 to over 1000 participants.
- Improved the rigor of the house captain interview and election process, restructuring the questions and format, and designing an agreement for candidates to sign at the end of their interviews.

PROJECTS

Recommendation List Web Application, *Next JS, Express, Firebase, HTML/CSS*   September 2024
- Developed an interactive web application using Next JS to enter and keep track of media that is recommended to me.
- Designed a RESTful API for CRUD operations connecting the frontend web application with the Firebase database with Express, to be able to keep record of the entries.
- Styled the site using CSS to make it more visually appealing for the users and very intuitive and comfortable to interact with.

Media Catalogue Web Application, *Flask, MySQL, AWS RDS/EC2, Linux*   August – September 2024
- Constructed a Flask web application for users to catalogue media consumed, with notes and ratings they decide to give them.
- Designed a registration/login system using Flask sessions that uses hashing to store user passwords and data, and on successful login displays the lists created by the user.
- Developed a RESTful API for CRUD operations connecting the frontend web application to a MySQL database.
- Created a development environment using an Ubuntu virtual machine and its own database to design the web application.
- Hosted application on a production environment composed of an AWS EC2 instance connected to an RDS database.

Restaurant Recommendation Algorithm, *Python, Scikit-Learn, Word2Vec*   June 2024
- Curated, cleaned, and processed the Yelp dataset to create a dataset of around 15,000 samples of restaurants, cafes, and bars.
- Designed a word embedding-based vector system with Word2Vec, using samples' descriptions, location, and other features.
- Created a recommendation algorithm for users' taste profiles, using cosine similarity between restaurants and taste vectors.
- Designed a recommendation system that recommend restaurants closest to a recent and overall taste profile for a user, based on their previously seen and liked restaurants.

SKILLS

Technical Skills: C/C++, Java, Python, JavaScript, React, HTML/CSS, MySQL, Firebase, AWS, Linux, Git, Microsoft Office
Languages: Spanish (Native), French (Intermediate – B1), Japanese (Beginner)
Hobbies/Interests: Playing the saxophone and guitar, cooking and baking, sports (tennis, basketball, soccer, golf).