Marcel Mateos Salles

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EDUCATION

Brown University, *B.S. Computer Science-Economics* **Providence, RI**
• **GPA:** 4.00/4.00 *Expected Graduation May 2026*
• **Relevant Courses:** Intro to Software Engineering, Data Structures and Algorithms, Discrete Math, OOP, Deep Learning, Comp Ling

PROJECTS

Little Label Learners (School) - *Python, Tensorflow, Keras, Numpy* *May 2024*
• Pioneered the development of a biology-mimicking deep learning model that enhances adaptability and minimizes data requirements
• Implemented a seamless transition from self-supervised to semi-supervised learning, along with dynamic category introduction
• Demonstrated ability to outperform purely self-supervised learning while coming within 10% of fully-supervised learning

SpacePals (Personal) - *Python, Javascript, React, CSS, GraphQL* *Feb 2024*
• Spearheaded development of webapp that allows users to "capture" different space animals by taking pictures of them
• Engineered frontend system that's updated in real-time as the backend utilizes CLIP to classify the image taken
• Integrated GraphQL to establish efficient communication between the frontend and backend systems

SpotiDuo (School) - *Java, Python, Typescript, CSS, React, Spark* *Dec 2023*
• Built a webapp that allows users to learn languages by listening to songs in other languages by filling in lyrics to reinforce listening
• Led the backend team and designed architecture for interaction between frontend and backend
• Utilized Spotify API to get metadata from songs and developed a recommendation algorithm to prompt users with new songs

Scary Stories (Personal) - *Python, Javascript, CSS, React* *Jan 2023*
• Developed a website for generating scary campfire stories based on user-inputted themes and incorporating safety tips
• Implemented a seamless user interface for displaying generated stories, ensuring an immersive storytelling experience
• Incorporated safety tips within the generated stories to promote camping safety, injury prevention, and wildfire awareness

WORK EXPERIENCE

Dexcom **San Diego, CA**
Software Engineering Intern *Jun 2024 – Aug 2024*
• Worked in mobile development team, designed mobile architectures and application for an iOS and Android app
• Conducted market research and developed three novel features for CGMs, unlocking new market of 700k users
• Developed a dynamic algorithm leveraged throughout Dexcom's software suite, specific to the needs of the new 700k stakeholders

Brown University **Providence, RI**
Teaching Assistant - Using Big Data to Solve Social and Economic Problems *Sep 2023 – Dec 2023*
• Led 2 separate lab sections, teaching 50 students the fundamentals of R, data analysis, and statistical techniques
• Hosted weekly office hours for debugging students' code and answering course content/assignment questions

UTSA SAVE Lab **San Antonio, TX**
Research Analyst *May 2023 – Sep 2023*
• Established cloud-based pipeline for seamless data access, maintaining lab's focus on uncovering roots of VR-induced nausea
• Utilized scripting techniques to manipulate and alter 20 terabytes of data as required for analysis and model training
• Ensured compatibility of the new system with existing machine learning models, leveraging TensorFlow to update models

EXTRACURRICULAR ACTIVITIES

Brown University Men's Swimming and Diving **Providence, RI**
NCAA Division I Student-Athlete, Diving Team Captain *Aug 2022 – Present*
• Balance 25-hour training weeks, competitions, and travel while managing a full academic workload
• Led a group of ten divers through workouts, fostering team cohesion and motivation while coordinating all team communication
• Awarded third highest score on the one-meter and three-meter springboards in Men's Swim and Dive history

SKILLS & INTERESTS

• **Languages:** Native proficiency in Spanish and English
• **Programming Languages:** Java, Python, Javascript, Typescript, R
• **Technical Skills:** React, Unit Testing, TensorFlow, Numpy, Scripting, Agile, API Development, Server Development, Git, Spark
• **Interests:** Cycling, Hiking, Fantasy Novels, Trying new foods, Traveling, Indie Music