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:** SWE, Data Structures & Algorithms, Discrete Math, OOP, Deep Learning, Comp. Ling. (NLP), Logic for Sys.

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

WORK EXPERIENCE

Brown University   **Providence, RI**
Researcher - Balestriero Lab   *Oct 2024 – Present*
• Authored "LoRA Users Beware: A Few Spurious Tokens Can Manipulate Your Finetuned Model" (https://arxiv.org/abs/2506.11402)
• Researching spurious correlation in large language models and building techniques to detect and remove it
• Developing an extensive open source library allowing users to customize large language models to use in their own research

Pinterest   **Palo Alto, CA**
Software Engineer Intern - Observability Team (Infrastructure)   *May 2025 – Aug 2025*
• Owned creation of DevAI observability tool leveraged by all 2000 engineers, reducing MTTR by 30 min per engineer per use
• Drove end-to-end development of an MCP server and RAG system that securely exposes internal tools and knowledge to AI agents
• Trained a novel anomaly detection model from unstructured and unlabeled system logs, decreasing rate of false negatives by 20%

Brown University   **Providence, RI**
Teaching Assistant - Deep Learning   *Dec 2024 – May 2025*
• Develop and teach lectures to 200+ students covering complex deep learning techniques and research papers
• Host office hours to debug students' code, explain lecture/assignment content, and mediate collaboration among students

Dexcom   **San Diego, CA**
Software Engineer 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

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
• Lead a group of ten divers through workouts, fostering team cohesion and motivation while coordinating all team communication

SKILLS & INTERESTS

• **Languages:** Native proficiency in Spanish and English
• **Programming Languages:** Java, Python, Javascript, Typescript, R, Stata
• **Tools & Skills:** API Development, Server Development, Git, Kubernetes, Elasticsearch, AWS, System Arch., Agile, Kafka
• **Frameworks and Libraries:** NumPy, TensorFlow, FastAPI, LangChain, Pytorch, React, Spark, NodeJS, Flask