MIGUEL ANGEL BRAVO MARTINEZ DEL VALLE

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EDUCATION

San Diego State University, *College of Arts and Letters*, San Diego, California — August 2023 - May 2025
Master's Program in Big Data Analytics — GPA: 3.94
Miami University, *College of Engineering and Computing*, Oxford, Ohio — August 2022 - May 2023
Foreign Exchange Program — GPA: 3.84
University of Malága, *Málaga*, Spain — September 2018 - May 2023
Degree in Electronics, Robotics and Mechatronics Engineering — GPA: 7.8/10

PROFESSIONAL EXPERIENCE

iCharm - SDSU Climate Informatics Lab, San Diego State University, *CA* — June 2024 - Present
Research Assistant *[Paid Position]*
- Helping to develop functions, tools and Data Visualizations components using Python, JavaScript [React] and API Frameworks. [*Full Stack Application Developer*]
- Processing structured and unstructured Big Climate Data repositories stored in the cloud and building data pipelines to manage it.

CodeGPT - AI4Business, San Diego State University, *CA* — January 2024 - May 2024
Research Assistant
- Conducted a literature review on the latest pre-training techniques for programming and natural languages, union the integration of models like CodeBERT, GraphCodeBERT, and UniXCoder into the Code Search project.
- Enhanced code search performance by applying advanced techniques from Large Language Models (LLMs) and continually incorporating new findings to improve encoding efficiency and semantic understanding.

Center for Information Convergence and Strategy, San Diego State University, *CA* — August 2023 - May 2024
Research Assistant
- Analyzed spatiotemporal data from agricultural watersheds using the Tri-Space approach to study nutrient dynamics and eutrophication from the Agricultural Catchments Programme dataset in Ireland.
- Conducted multivariate and multitemporal analyses, focusing on chemical parameter correlations, while ensuring data integrity and reliability through advanced cleaning and processing techniques in R.

HorstSort II - Smart Campus, University of Málaga, *Spain* — March 2022 - June 2022
Engineering Intern
- Led the integration of IoT technology into the Science Teaching Garden for real-time monitoring of environmental parameters (temperature, humidity, and light). Developed and implemented a wireless sensor system using ESP8266 and set up remote control via MQTT and NodeRed, with Telegram as a user interface for remote updates and control.
- Authored and defended a research paper summarizing project objectives, observations, methods, and conclusions. Successfully presented the thesis to the examination board as part of my degree in Electronics, Robotics, and Mechatronics Engineering.

AWARDS AND INVOLVEMENT

Western Users of SAS and Open-Source Software [WUSS] Conference Scholarship — September 2024
- Awarded the Student Scholarship and presented on Machine Learning [*Flight Delay Analysis and Prediction*]

International Student Exchange Program Scholarship, *ISEP Organization* — August 2022 - May 2023
- Highly competitive ISEP scholarship awarded based on academic merit, covering housing, tuition, and meals, along with a monthly stipend, allowing me to spend a year studying at Miami University

Honorary Scholarship, *Sagrado Corazon de Jesus* — June 2018
- Prestigious recognition given to outstanding students, awarded for exceptional academic performance in high school

RELEVANT SKILLS

Languages: Spanish (Native), English (Advanced)
Programming: Python, HTML, CSS, React, JavaScript, SQL, C++, Java, ROS, NodeRed, R
Technical Skills: Computer programming languages, Financial management
Interests: Cryptocurrencies, Stock Market, Artificial Intelligence, Data Science
Aptitudes: Communication, Collaboration, Attention to Detail, Empathy, Multitasking, Positivity, Problem-Solving