Daniel **Hernandez**

Software Engineer

Santa Cruz de Tenerife, Spain

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Skills

- React · Svelte · TypeScript · TDD · Agile · UI/UX · Mobile (React Native, Flutter) · C# · OOP · CI
- Python · Flask · Express · Java · C/C++ · RESTful API · CLoud · Serverless · Microservices · Authentication
- PyTorch · TensorFlow · Keras · PostgreSQL · SQL Server · Data Science · NLP · Threading · Big Data

Work Experience

Software Engineer
Feb. 2023 - May. 2023

TITSA S.L.
St. Cruz de Tenerife, Spain

- Teamed with +10 people in a data science department.
- Developed Machine Learning models achieving an 85% confidence rate in customer prediction, translating to a 10% increase in customer retention, driving around $10k in additional yearly revenue.
- Analyzed +100k data points for algorithms.
- Implementation of cutting-edge routing algorithms in C++, contributing to a substantial 15% reduction in fuel investment.
- Development of a Full Stack web app, integrating React and Flask. Collaborated closely with the sales product team, resulting in the delivery of an MVP with an initial user base of +1k users within the three months.
- Migration of single-threader Python code to multi-threaded, driving to around 70% performance with 6 cores CPU, to later translate it to Rust, increasing the performance of the algorithms up to 120%.
- Engineered a Python server API, reducing data transfer latency and used SQL Server for data analysis and automation, reducing manual data processing efforts and enabling the automation of 25% of the task routines.

Projects

AI to predict AWS Cloud services
Sep. 2022 - Jun. 2023

B.S. Thesis

- Achieved 72% accuracy in predicting failures and an error rate of $0.02 in predicting the cost of future services using the models.
- Developed a full-stack web app using Solid JS and FastAPI, ensuring a high speed connection (0.5-second delay) from user input to the server for model training and result display.

PathFinder
Aug. 2021 - Dec. 2022

JavaScript Frontend with C++ Backend

- Achieved high performance by solving a matrix of size 500x500 in under 1 second on a website using C++. This represents a 200% improvement compared to JavaScript V8 performance.
- Allows you to select state-of-the-art algorithms with animations and interact with the UI using drag & drop.

Virtual Reality Detective Game
Aug. 2022 - Dec. 2023

Unity / C#

- Utilized Unity3D and VR technologies to simulate realistic crime scenarios, resulting in a heightened sense of immersion.
- Enhanced problem-solving skills of players by creating challenging puzzles and logical deductions.

Education

B.S. in Computer Engineering
Sep. 2019 - May. 2023

ULL - University of La Laguna
San Cristobal de La Laguna, Spain

- Attained a 40% equivalence to human score through an AI-powered Agent bot for shooter games with Unity / C#.
- Engineered desktop app for hand gesture recognition in Python, incorporating features like gestures, finger count, and hand-based painting, all while emphasizing the enhancing of UI/UX experiences.
- Accomplished a 76% accuracy in Text classification software (NLP) in sentient-analysis at emails.
- Developed a JavaScript-based interpreted and compiled programming language.
- Mastered Object-Oriented Principles and Design Patterns, mainly in C/C++.