Paolo Pedrigal

510–520–1538 | paolopedrigal@gmail.com | linkedin.com/in/paolopedrigal | github.com/paolopedrigal | Portfolio

Technical Skills

Languages: JavaScript/TypeScript, SQL (Postgres), HTML/CSS, Python, Java, C/C++
Libraries/Frameworks: React, React Native, Next.js, Node.js, Express.js, Bootstrap
Tools: Git, Linux (Untuntu), AWS, Docker, Expo, Jira

Experience

Software Engineer   September 2022 – Current
Tayo.One   *San Francisco, CA*
- Accomplished a 25% improvement in web application performance, as measured by page load times, by developing modular components in TypeScript and React (Next.js 13).
- Co-maintained a PostgreSQL database, ensuring data integrity and reliability, resulting in a 15% reduction in data-related issues.
- Leveraged Docker containers to create a consistent and scalable development environment, promoting code portability and collaboration.
- Collaborated with lead software engineer, UX designer, and product manager through code reviews and stand-up meetings, resulting in a 15% improvement in code quality.

Product/Test Engineering Intern   June 2022 – August 2022
Skyworks Solutions, Inc.   *Irvine, CA*
- Implemented 2 Python scripts that extracted semiconductor data from raw data to improve the efficiency of data analysis.
- Updated code documentation by 15% to meet the current version of my team's software.
- Reported 3 bugs found at the front end user interface of my team's data analytics system in TIBCO Spotfire.
- Collaborated with the other engineers through daily to weekly stand-up meetings.

Front End Developer Intern   June 2021 – August 2021
MLiora, LLC   *San José (Remote), CA*
- Assisted the front end development team in coding the company's prototype website.
- Coded 10+ React JS components for code reusability to streamline development time by 15%.
- Implemented basic CSS Bootstrap styling to existing webpages.
- Worked in a fast-paced environment at a startup, gaining teamwork and communicative skills.

Data Science Fellow   June 2021 – August 2021
University of California, Santa Barbara   *Santa Barbara (Remote), CA*
- Performed data analysis with Python's NumPy and pandas on 295,938 entries of biological data on bee species and plant species.
- Created 2 linear regression models to detect correlations between the data on bee species and plant species.
- Trained and tested a KNeighbors classification model to identify bee-plant interactions by bee family.
- Utilized heat maps and world map plots to present findings of research.

Data Science Mentee   April 2021 – June 2021
Stanford Biomedical Data Science Program   *Palo Alto, CA*
- Leveraged knowledge in data science fundamentals through Stanford's *Inclusive Mentoring in Data Science* and mentor.

Projects

Wordle Customizer Full Stack Website | *React, JavaScript, HTML, CSS, Express, Node.js, PostgreSQL, AWS*
- Built a full-stack website that allows users to create their own version of Wordle (The NY Times). Users will then be able to share their custom game with friends through a private link.
- Handled REST API routes on an Express server, interacting with a PostgreSQL database, while fetching data from the frontend using Axios.
- Deployed the application on an Ubuntu server in an AWS EC2 instance, configured with an NGINX reverse proxy.

Predicting Universal Studios Ratings | *Python, NumPy, pandas, Matplotlib, NLTK, sci–kit learn, Jupyter Notebook*
- Applied basic machine learning principles and exploratory data analysis to predict the ratings of a Universal Studios reviews dataset.
- Preprocessed raw text, utilizing Python's NLTK, by removing non-English and stop words in each ratings text.
- Trained a Multinomial Naïve Bayes machine learning model, splitting 20% of the data for testing and using an F1 score metric for accuracy.

C++ Server from Scratch (University Course Assignment) | *C++, Docker*
- Simulated a voting system by creating a local server that accepts clients simultaneously, utilizing C++'s pthread and signal libraries and knowledge of synchronization fundamentals.
- Used basic Docker methods to ensure proper environment setup.

Instagram Web Scraper (University Course Assignment) | *Python, Selenium, Beautiful Soup, SQLite, Tkinter*
- Web scraped data dynamically from Instagram posts, utilizing Python's Selenium and Beautiful Soup libraries.
- Performed CRUD operations by storing data in a local SQLite database and displaying results on a simple GUI.

Interactive Neighborhood Map | *JavaScript, HTML, CSS, Python*
- Coded an interactive map of neighborhoods in North San José, California using HTML Scalable Vector Graphics (SVG).
- Obtained raw geographic coordinates through Google My Maps and rescaled coordinates in Python.
- Added JavaScript event handling to display neighborhood information and styling when neighborhoods are clicked.

EDUCATION

University of California, Irvine — Irvine, CA
Bachelor of Science, Computer Science — *June 2023*
- Recipient of the Regents' Scholarship, Dean's List in Fall 2021
- Relevant Coursework: Machine Learning & Data Mining, Beyond SQL Data Management, Algorithms & Data Structures