

Diego Pestana

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Education

Universidad Metropolitana – BS in Systems Engineering Feb 2024

- Honors: summa cum laude, **GPA: 18.52/20.00**
- Relevant Courses: Algorithms, Data Structures, Computer Architecture, Operating Systems

Experience

Senior Software Engineer, Venezolano de Crédito – Caracas, VE Aug 2023 – Present

- Built a RESTful API using Java, Spring Boot and SQL that allows outside parties to access bank's financial services, facilitating 10,000+ users and supporting 50,000+ daily operations
- Developed and implemented a supervised financial transaction classification model using a bag of words and random forest, enabling personalized financial recommendations and targeted marketing campaigns
- Led a team of 5 in delivering continuous features and updates to a Flutter-based mobile app, meeting user needs and driving a 30% increase in store reviews that boosted the app's rating
- Integrated with a third-party tax administration service to provide online tax payments through a full-stack web app made using Java and React.js, resulting in \$5,000,000+ collected thus far
- Built a JavaScript library that generates and scans QRs with user's public banking information, easing the exchange of data and increasing by 10% the amount of daily P2P operations

Junior Software Engineer, Venezolano de Crédito – Caracas, VE Jan 2023 – July 2023

- Wrote Python scripts to generate daily currency exchange reports, minimizing manual intervention
- Reengineered a Java legacy codebase using a TDD approach, reducing tight coupling and increasing adaptability
- Optimized an Oracle database using materialized views and connection pooling, cutting query execution times
- Migrated 15,000+ lines of JQuery to JavaScript ES6 in order to improve compatibility with modern frameworks

Software Engineer Intern, Venezolano de Crédito – Caracas, VE Sept 2022 – Dec 2022

- Started the development of a Flutter-based mobile app designed to simplify everyday tasks for users
- Redesigned 62 non-responsive pages with CSS, making them fit correctly on different screen sizes, e.g. mobile
- Solved 30+ customer issues reported by support tickets, enhancing the reputation of the bank's web app

Database Teaching Assistant, Universidad Metropolitana – Caracas, VE Apr 2022 – Dec 2022

- Provided guidance and support during check-in meetings and open office hours
- Conducted reinforcement sessions where database fundamentals were taught to a group of 35 students
- Increased by 30% the number of passing students in relation to previous terms

Research & Projects

Automated Credit Limit Adjustment (ACLA) Model diegopestana.com/research/acla.pdf

- Collected a large dataset of 10,000+ limit adjustment decisions, applying data preprocessing techniques
- Trained and compared multiple models (MLP and XGBoost), evaluating their performance and taking into consideration the trade-off between accuracy and interpretability
- Optimized model hyperparameters through grid search with 10-fold-cross-validation, increasing accuracy
- Presented research findings and results to business areas, driving adoption and implementation of ACLA

Technical Skills

Languages: Java, Python, JavaScript, TypeScript, SQL, Dart, C++ , Shell

Technologies: Spring Boot, TensorFlow, Keras, Node.js, PostgreSQL, Oracle, Flutter, Git, LaTeX

Achievements & Awards

- Secured an Academic Excellence Scholarship totaling \$25,000 over four years at Universidad Metropolitana
- Awarded Dean's List Recognition in 2022 and 2023 at Universidad Metropolitana
- Received Honors in Undergraduate Industrial Project at Universidad Metropolitana