JOSE LUIS FLORES CAMPANA

(+55)19987210884 \diamond jluisflores357@gmail.com \diamond Linkedin \diamond Web Page \diamond Github \diamond Scholar

EDUCATION

University of Campinas, Brasil March 2020 - April 2024 Ph.D. in Computer Science GPA: 4.00 (4.00/4.00) University of Campinas, Brasil July 2017 - March 2020 M.Sc. in Computer Science GPA: 3.65 (3.64/4.00) Universidad Nacional San Antonio Abad del Cusco, Peú March 2012 - July 2016 B.Sc. in Computer Engineering (Computer Science) GPA: 18.00 (18.00/20.0)

EXPERIENCE

Software Engineering, Brasil

Loggi

- Implemented the outbox pattern to write events to a database table, ensuring atomicity, and used Debezium to stream changes to Kafka. Downstream services consumed events from Kafka, enabling asynchronous processing and reducing database load. This improved scalability, reliability, and decoupling across the system.
- Developed a chatbot for package tracking and customer inquiries, leveraging LLMs (Large Language Models) concepts. Built with Python and JavaScript, the chatbot improved response times by 5x and significantly enhanced customer satisfaction by providing accurate and instant support.

Machine Learning, Brasil SAMSUNG - UNICAMP

- Developed a novel lightweight model for generating parallax motion effects from a single image, optimized for constrained devices such as smartphones. The model demonstrated a 3% improvement in efficiency compared to recent state-of-the-art methods.
- Designed and implemented post-processing algorithms to enhance text localization accuracy by 4%, leveraging Tesseract OCR. Additionally, developed fusion methods using genetic programming (GP), achieving a 5% improvement over multiple baseline approaches.

Software Engineering, Perú

Brain Systems

· Designed and developed APIs and services for generating XML files and PDF reports as part of the electronic invoicing project (BS EFACT). Played a key role in establishing one of the first electronic invoicing solutions in Cusco, leveraging efficient SQL procedures with SQL Server to ensure robust and scalable performance.

PROJECTS

Damage Package Declaration Project

We developed an app to manage damaged package declarations and prevent fraud, using PostgreSQL for data management, Python for backend logic, and RESTful APIs for communication. Photos were stored in AWS S3, and a model was built to classified damaged packages in AWS SageMaker. The frontend, built with JavaScript and React, provided a seamless user experience. The project delivered a robust system combining backend, AI, and frontend capabilities.

Tracking Package Life Cycle Project

We built a microservice in Python and FastAPI to track package lifecycle using a hexagonal architecture with Pydantic models. Sentry was used for frontend logging, while ElasticSearch managed backend logs. For monitoring, we implemented Prometheus and Grafana dashboards. The microservice was optimized for scalability with pagination and caching to enhance API performance. This ensured efficient handling of data and real-time tracking capabilities.

Oct 2021 - present

Aug 2018 – Jun 2021

Jan 2016 - Jun 2017

LANGUAGES

Proficient Spanish, English and Portuguese

PROGRAMMING SKILLS

C, C++, Python, & Java, PosgreSQL, Docker, Git, Javascript, React, NodeJS, AWS, OpenSearch, Sentry