

Alejandro Alvarez Etchegaray

Experience

ORACLE

Guadalajara, Mexico

Senior Software Engineer / Senior ML Engineer

January 2021 - present

- Developed and released a new user interface (UI) for an existing Supply Chain Management product with a large customer base and high visibility in the industry.
- Collaborated with cross-functional teams including product managers, designers, and QA engineers to define requirements, design UI mockups, and implement features.
- Played a key role in the successful launch of the updated product, being in constant communication with stakeholders and clients.
- Collaborated in designing and developing the Network Data Analytics Function for 5G mobile networks based on 3GPP standard, from the architecture, to actual implementation.
- Developed machine learning models for optimizing 5G networks, automating network operation tasks and decisions.
- Designed and implemented a framework for model deployment in production using Kafka, ensuring scalability and reliability.
- Keywords: *Javascript, SQL, Python, Keras, Tensorflow, Druid, MySQL, Kafka, Java EE, Spring Boot, Kubernetes, Docker*

ORACLE

Guadalajara, Mexico

Software Engineer

July 2016 - July 2019

- Developed infrastructure components for Oracle's Big Data platform using Hadoop.
- Collaborated in the development and maintenance of a fully automatic deployment of Hadoop clusters based on the client configuration on the cloud.
- Worked on various Linux tools for managing and automating network and security configurations for a big data cloud service.
- Keywords: *Linux, Perl, Python, Hadoop, Bash, Spark, Puppet*

AZURLINGUA

Nice, France

Software Development Intern

September 2015 - January 2016

- Ported various old Php projects to newer versions of Laravel, for Bonjour de France a website dedicated to learning french as foreign language.
- Developed a tool in Php to cut, resize and scale images on demand for the web server, to optimize loading times.
- Keywords: *Php, Laravel, MySQL, Linux*

TERALOC

Cuernavaca, Mexico

Software Development Intern

January 2015 - July 2015

- Collaborated in a development of a mobile system for an insurance company using Php and iOS SDK.
- The system consisted in realtime GPS tracking and submission of reports of traffic accidents and incidents.
- Keywords: *Php, iOS, Objective-C, MySQL*

Education

Ms Data Science — Universidade Nova de Lisboa (2020)

Lisbon, Portugal

Bs Computer Science — Tecnológico de Monterrey (2016)

Cuernavaca, Mexico

International Exchange — University of New South Wales (2012)

Sydney, Australia

Skills

- Programming Languages: **Python, SQL, Javascript, Java, Php.**
- Data Science Techniques: **Machine Learning, Data Visualization, Statistical Analysis.**
- Great communication skills, written and spoken, **Spanish** and **English.**
- Demonstrated leadership and ownership in projects, with a proactive approach to accountability and results delivery.

Projects

Product Matching in Medical Bills

- Created a REST API to analyze medical bills and return matches in an internal catalog.
- Designed and developed the machine learning models behind the REST API, to convert the medical bills to structured data and to classify and match each item with the items in the catalog.
- Technologies: Python, Oracle DB, Java

ProcessMaker Integrations

- Implemented various integrations between process maker and billing systems, analytics, MercadoLibre, and CRM systems, improving efficiency and data management for clients.
- Technologies: Python, PHP, Laravel, Django, MySQL, Google Cloud Platform, Google Analytics

Victoria Fest

- Created a system for a live event focused on entrepreneurship for women, managing all aspects including registration, mailing campaigns, live event streaming, and post-event analytics.
- Successfully handled thousands of concurrent viewers during the live event.
- Technologies: Python, Django, Google Cloud Platform

AMEPSO Ibero

- Developed a suite of virtual classrooms to facilitate the hosting of the prestigious Mexican Congress of Psychology in 2021, conducted live.
- Crafted a comprehensive array of interactive tools empowering attendees to engage seamlessly with organizers, presenters, and fellow participants, enhancing the overall event experience.
- Technologies: Python, Django, Google Cloud Platform

Portfolio Optimization Using Evolutionary Algorithms (Master's Thesis)

- Conducted research on optimizing investment portfolios in the stock market using evolutionary algorithms.
- Implemented computational models to improve portfolio performance through data-driven strategies.
- Create a webpage to search, visualize and interact with computer generated portfolios.
- Technologies: Python, Django, Javascript, Bootstrap

Alerta Migrante

- Developed an iOS/Android application for a law firm to provide immigrant communities in the US with direct access to their attorneys.
- Implemented features for secure communication and information sharing, enhancing accessibility to legal services for immigrants.
- Technologies: iOS, Xamarin, Android, Python, Django, MySQL