Ezequiel Alvarez

Personal Information

Birth date June 6, 1992

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Github https://github.com/clrnd

Career History

Jun. 2022 - Present

Technical Leader, *PuraMente*, Argentina.

React Native developer for a well-being / meditation App. Worked mostly as Technical Leader, taking care of high-level and architectural decisions, as well as designing the AI pipeline, and generally raising the code-quality of the team.

- AI: designed an LLM integration using MCP for our CRUD backend involving structured outputs and tool calling.
- MongoDB: handled the on-going partial migration from Firebase RTDB to MongoDB.
- Notifications: revamped the notification flow by implementing custom audience logic and an efficient SQL-based growth model.
- Code quality: implemented several rules regarding tests, hooks, and ways to handle complexity in the mobile App code.

Aug. 2018 - Jun. 2022

Software Developer, *10Pines*, Argentina.

Working as a contractor for different accounts with the premise of clean code and quality processes, especially Agile and TDD.

- Ualá: Personal finance application. Developed backends for both a Crypto Exchange and a Common Investment Fund modules. Lambda-oriented architecture using Terraform and Java. Mostly Amazon's Lambda, SNS, SQS and RDS. Great emphasis in TDD and an OOP design. Integrations with multiple financial APIs, asynchronous processing of files and reports, and a REST API for the backoffice and the mobile Application.
- Bread: Financing platform for e-commerce applications in the US and Canada. Worked mostly in the Member and Servicing Portals, the former a standalone SPA and the latter a SPA with a BffE approach. Big microservice architecture for the APIs, handling of payments and sensitive data.
  Technologies: ReactJS, Kubernetes, GoLang, Node.js, Postgres
- Alsea - Finanzas: Dashboard for aggregating and analyzing financial information from multiple data sources.
  Technologies: ReactJS, Spring Boot, SQLServer
- Alsea - Graficas: Development, deployment and migration to React from Flash of an employee scheduling application.
  Technologies: Flex, ReactJS, Java, Spring, Hibernate, SQLServer
- Alsea - Digitalización: Development of a digitization system for invoices and financial documents.
  Technologies: Ember, Java, Spring, Hibernate, SQLServer

Mar. 2014 - Aug. 2018 **Software Developer**, *Grupo MSA*, Argentina.
Worked as a developer in the Operations team, facilitating and performing logistics for multiple electoral processes, including storage and inventory, call center tooling and reporting.

- SIGEL - Sistema Integral de Gestión Electoral: Web platform to implement and monitor electoral operations and logistics. Some features include the ability to make calls over WebRTC, a real time notification system, as well as communication with the mobile App through a custom SMS-compatible protocol.
  Technologies: Django, Postgres, Tornado, ReactJS, JQuery, WebSockets, WebRTC, SIP.
- SIGEL - Nacionales: Web App for the National Elections of 2015 and Legislative Elections of 2017. It was used by the DINE and Correo Argentino to detect irregularities and aggregate statistics of the 15000 electoral stations.
  Technologies: Django, Postgres, D3.js, Falcon.
- Witt: A mobile Application for the electoral staff that communicates with SIGEL over a REST API and an SMS-compatible protocol (for remote zones).
  Technologies: React, Cordova, Android.
- YOG Dashboard: Single-page application for monitoring and tracing of attendees and staff for the Buenos Aires 2018 Young Olympic Games.
  Technologies: REST APIs, React, D3.js.
- Elecciones - Data Pipeline: Complex processing pipeline of Election Data. Feeding from multiple sources like local government's configuration CSVs, custom JSON files for smaller elections, and others, this project outputs several data formats for different applications.
  Technologies: Python, JSON, CSV, marshmallow, asyncio, celery, Postgres

Jul. 2012 - Mar. 2014 **Software Developer**, *Avatar LA*, Argentina.
Worked as a web developer on different projects:

- Disney - Minigames: several canvas-based HTML5 games using Impact.js.
- MasterCard - Masterconsultas: Spring-backed statically generated site with a custom framework.
- Banco Ciudad: Almost complete .NET rewrite of *bancociudad.com.ar*, plus JQuery frontend.
- Marvel LA: Symphony2 CMS for Marvel sites.

Personal Projects

discogs2pg tool to efficiently import Discogs' gigabyte-sized XML dumps into Postgres.

win95-maze-rs tribute to Windows' 95 maze screensaver in OpenGL.

latexpad simple LaTeX MathMode + Markdown editor for doing math homework collaboratively.

wave2blofeld A custom wave to wavetable over MIDI SysEX converter for the Waldorf Blofeld

OpenSource Contributions

GeoPandas Fixed how label data was computed for choropleth maps.

WaveEdit Implemented changes in order to support the Waldorf Blofeld synthesizer

Education

Mar. 2013 - Abandoned **MS in Computer Science**, *FCEyN, Universidad de Buenos Aires.*

High School **Bachelor in Electrical Engineering**, *E.E.S.T. N°9.*

Courses and training

2019 **Haskell Workshop**.
Organizer and speaker of two 40+ people Haskell Workshops for beginners.

2018 **Architecture of graphics processors and applications**, *ECI 2018*.

2015 - 2020 **Haskell Meetup**.
Organizer and multiple-times speaker of the Buenos Aires Haskell Meetup.

Notable Experience with

Languages	Java, TypeScript, Python, Haskell, C++, Rust
Testing	TDD, CI, JUnit, Jest, Storybook, Jenkins, PyTest
Web Backend	Express, Spring Boot, REST, Django, Servant, NextJS
Web Frontend	React Native, React, JQuery, Bootstrap, Material Design, D3 and SVG visualizations
Mobile	Android, iOS, both native and using react
Data Science	Pandas, Jupyter Notebook, Kibana
Others	Audio processing, Godot game engine

Languages

English	**Advanced**
Spanish	**Native**