EDUCATION

Faculty of Engineering of the University of Porto

Porto, Portugal

BSc + MSc in Informatics and Computing Engineering (GPA 16/20)

Sep. 2015 - July 2020

- Master's Thesis entitled "Lightweight Real-time Feature Monitoring" (19/20)
- Author of two certified USPTO patents entitled "Automated Feature Monitoring For Data Streams" and "Generation Of Divergence Distributions For Automated Data Analysis"
- Member of the competitive programming team

EXPERIENCE

Platforme Porto, Portugal

Software Engineer II

July 2021 - Present

- Responsible for onboarding new software engineers and mentoring interns.
- Built a physical retail tablet app used by store employees to help clients personalize their product. Easily customizable app to allow publishing for multiple merchants while matching their brand.
- Built an Enterprise Bus API used for communication by several micro-services (event sourcing pattern). This API supports different bus adapters (e.g., Kafka, RabbitMQ).
- Built the shipping micro-service responsible for covering the shipping lifecycle of new orders (e.g., create shipments, retrieve proof of delivery, send SMS and e-mail notifications). Supports multiple couriers while syncing with Platforme's systems.

Software Engineer I Sep. 2020 – Jun. 2021

- Built a micro-service that connects Platforme's systems to brands' stores. Made use of different adapters in order to connect to different e-commerce providers (e.g. Shopify, Salesforce). Responsible for keeping order state synched in both systems.
- Built a platform where Twitch streamers can customize products using a browser-based app during live streams. Viewers react to the customization via reaction buttons and the hightest customizations could be directly purchased.
- Enabled horizontal scaling by splitting a monolithic app to a micro-service communicating via RabbitMQ, making it 5x faster
- Built an open-source PNG blending Rust crate with an API available in Rust, WebAssembly and Python.

Feedzai Porto, Portugal

Systems Research Engineer

Feb. 2020 - July 2020

- Researched and developed a lightweight method for analysis of numerical features in streaming environments and concept drift detection which resulted in the submission and acceptance of two USPTO patents.
- The resulting algorithm was able to detect all streaming outliers with divergence measures above the 99th percentile.

Research Engineer July 2019 - Sep. 2019

• Built a tool to aggregate high and low level documentation proving to be a 4x faster way to search docs.

PROJECTS

- Parrot | Rust an open source Discord music bot
- **№ NES Emulator** | Rust
- © CHIP-8 Emulator (browser demo) | Rust

TECHNICAL SKILLS

Languages: JavaScript, Python, TypeScript, Rust, Java, C++, C, PHP, Prolog

Frameworks: ReactNative, ReactJS, VueJS, Django, Flask, NodeJS

Databases: PostgreSQL, SQLite, MongoDB Data Engineering: Spark, Kafka, RabbitMQ

EXTRACURRICULAR ACTIVITY

ACM FEUP Student Chapter | Founding member of the FEUP chapter

Mar. 2020 - July 2020

• Organized multiple biweekly talks that brought together software industry professionals, professors, academic researchers and students to discuss on varying subjects (such as the pursuit of higher education).

IEEE UP Student Branch | Computer Society Member

Feb. 2018 – July 2020

• Organized and lectured multiple programming languages workshops (e.g., Java, C++).

$\textbf{Summer University} \mid \textit{Teaching Assistant}$

July 2019

• Taught programming fundamentals to juniors showing them how to build a *Brick Breaker* clone using Scratch.

Competitive Programming

Oct. 2018 – March 2019

- Google Hash Code 2019, 9th national place.
- IEEExtreme 2018, 5th national place.