

Nelson Goncalves

Software Developer

About Me

I am an experienced software developer with 10 years of experience (most of them working remotely). I love working on challenging problems and creating software that makes people more productive and happier. I am adaptable, dependable and determined.

Contact Information

Location: Braga, Portugal

Skills & Expertise

Javascript/Node.js, Go, Python, C, C++, GraphQL, Redis, GRPC, Typescript, PostgreSQL, MySQL, NSQ, Git, Linux/Unix.

Professional Experience

Backend Developer at Uphold

 September 2020—Current

- Worked on the development of our GraphQL API which is implemented on top of a micro-service architecture.
- Added distributed tracing support in several micro-services to track and troubleshoot high latency requests/bottlenecks, significantly reducing the time it takes for the team to investigate a production issue.
- Implemented a gains and losses feature to efficiently support over 1TB of data, requiring mathematical proofing, implementation and deployment. The data is calculated in a budget of 50ms and rendered on the main screen of our apps.
- Implemented a new service to ingest ~2M rows per hour of ticker data and output historical balances and prices for several currencies over several time frames. This is a core service as it returns the data for the graphs rendered in the main screen of our apps. By leveraging TimescaleDB's features we were able to double the number of points of each graph (versus the previous implementation) while cutting response times by almost 50% and reducing infrastructure costs.

IC3 Developer at Oracle

 February 2013—August 2020

- Implemented several of the cluster commands and the sandbox feature for MySQL AdminAPI. Successfully abstracted way much of the complexity that comes with creating, configuring and managing Group Replication and semi-synchronous replication scenarios built with MySQL.
- Implemented several of the utilities in MySQL Utilities, a set of tools, written in Python, used for maintenance and administration of MySQL servers and targeted at DBAs and Devops.
- Created a Python C extension to wrap an in-house group communication library. This Python extension turned library was core to the development of MySQL Fabric.

Achievements

Master's in Informatics Engineering

 Universidade do Minho

Master degree in Informatics Engineering with specializations in Distributed Systems and Formal Methods.

Bachelor's in Informatics Engineering

 Universidade do Minho

Hobbies & Interests

My hobbies are listening to music, playing tennis, swimming and mountain biking.