Cloud Services Engineer at Youview
London
Oct 2018 - Aug 2019

Microservices in Clojure, Go and Javascript, that integrated with AWS services. Successfully pitched an initiative to reduce the cloud services bill by consolidating a set of overly fragmented microservices.

NODE.JS - GO - CLOJURE - AWS - MICROSERVICES

Clojure Engineer at Funding Circle
London
May 2017 - Sep 2018

Kafka CQRS and microservices in Clojure. I was part of a migration/re-architecture fintech project that took care of redistributing payments made by loan recipients to investors.

CLOJURE - KAFKA - RUBY - EVENT-STREAMING

Software Engineer at Style.com
London
Apr 2015 - May 2017

E-Commerce built with Clojure(script) and Datomic. Designed and built a high-performing NGINX/Lua lightweight server to gate the main app during pre-launch. Successfully pitched the technology choice to the rest of the team.

CLOJURE(SCRIPT) - DATOMIC - NGINX/OPENRESTY

Independent Full-Stack Developer
Lisbon
Mar 2014 - Apr 2015

Published a RoR project and a custom Shopify store. Provisioning servers for a Ruby on Rails stack. Node.js service integrating an IoT weather station cloud platform

RUBY ON RAILS - NODE.JS - SHOPIFY

Application Developer at Crowdprocess
Lisbon
Mar 2013 - Mar 2014

First application developer at a distributed computing startup. Led development of an internet browser-based forest fire model based on original research.

NODE.JS - POSTGRES - POSTGIS - C/C++ - PYTHON

Research Assistant at University of Lisbon
Lisbon
Feb 2010 - Nov 2012

- Invited to work on funded research while studying, after volunteering at a fluid simulation lab several times.
- Co-authored two papers with 28 citations as of 2025 and developed a GPU algorithm that achieved speed-ups of 200 times.

C - CUDA - JAVA - STARCCM+ - PARAVIEW

Education

MSc. in Mechanical Engineering at University of Lisbon
Sep 2008 - Jun 2011
Course representative for 2009/2010. Worker student. Grade: A.

BSc. in Mechanical Engineering at University of Lisbon
Sep 2004 - Sep 2008

Tech community

- Speaker at Babashka Conf. 2023
- Speaker at Equal Experts Conference. 2023
- Clojure macros for performance testing. 2022
- Maintaining Open Pass Rates. 2021
- Open Pass Rates Jupyter notebooks. 2021

Research Papers

- Faster Than Real Time Stochastic Fire Spread Simulations, 2013. doi
- Simulation of Surface Fire Fronts Using Firelib and GPUs, 2012. doi
- Numerical Investigations on the Inter-Car-Gap Flow for a Generic High-Speed Train, 2011. doi

Awards

- Second Place winner in the MSc. Category of the 2011 Fraunhofer Challenge.
- Semi-finalist at an MIT-backed Startup Pitch Competition.

Training and certificates

- Think Again: How to Reason and Argue
  Coursera, 2016.
- Algorithms, Part 1
  Coursera, 2017.
- Vipassana 10-Day Meditation Retreat
  Chennai, India, 2018.
- Neural Networks and Deep Learning
  Coursera, 2021.
- Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization
  Coursera, 2021.
- Synapses, Neurons and Brains
  Coursera, 2021.
- Build a Modern Computer from First Principles
  Coursera, 2022.
- Philosophy of Mind
  DCE Oxford, 2022.
- Seminars on Bitcoin
  Chaincode Labs, 2023.