Rodrigo Araujo

rod.dearaujo@gmail.com

Experience

CTO.ai
Senior Software Engineer   *Sept 2018 - Current*
- Technical lead and founding engineer on the RE/MAX project. Designed and developed a distributed ETL system composed of 8+ microservices deployed as 200+ pods on Kubernetes clusters ingesting and processing multiple petabytes of data. This system processed, stored, and exposed real estate data across US and Canada. Stack: Go, Kafka, Elasticsearch, Redis, Postgres, Docker, and more.
- Designed the first observability standard used across the company; as of current: Prometheus for application and system metrics instrumentation, Logstash for log aggregation, and Grafana for visualization and alerting. The standard includes best practices on how and what to instrument, monitor, and log.
- Hiring squad member. Responsible for parts of the engineering interview process. Tried to make technical interview slightly less broken.
- Mentored junior, intermediate, and senior engineers, unblocking and giving them appropriate training to be able to understand the tools, techniques, and concepts used in our team.

SOFTWARE PRACTICE LAB, UNIVERSITY OF BRITISH COLUMBIA
Research Software Engineer & Graduate Teaching Assistant   *Sept 2016 - Aug 2018*
- Worked on the CPSC310's (Introduction to Software Engineering) automated testing infrastructure, responsible for running automated frontend and REST API tests on hundreds of student's GitHub repos. Stack: NodeJS, TypeScript, Karma for testing, and Docker.
- Created *Finch,* an experimental tool written in Go to turn a target system into a self-adaptive system by injecting a MAPE-k control loop into it. The target system learns how to adapt to different contexts in order to be more efficient.

JUSBRASIL
Software Engineer, Machine Learning   *Dec 2014 - Aug 2016*
- Worked with the Data Science Team, experimenting, building and shipping Large-Scale Machine Learning Systems to over 30 million users monthly. Stack**:** Python, Tensorflow, scikit-learn, Redis, HBase, Docker, Chef and Consul for infrastructure management, and RabbitMQ for job queueing.
- Created the Legal Issue Classifier service, improving 8% of the leads, resulting in 5000+ leads per month and decreasing workload of the human-moderation team. Ensured its correctness, performance and debuggability by implementing components for monitoring and observability in the system.
- Researched and experimented on NLP, Automatic Text Classification, Stacked Regressions, and improvements on Feature Engineering Process.

TECHNICAL DEBT RESEARCH TEAM, UNIVERSIDADE SALVADOR
Research Assistant   *Aug 2014 - Jun 2015*
- Research on Technical Debt in Software Engineering.
- Accepted paper: A Collaborative Computational Infrastructure for Supporting Technical Debt Knowledge Sharing and Evolution. In: Americas Conference on Information Systems, 2015, Puerto Rico. 2015 Americas Conference on Information Systems, 2015.

AVANSYS
Software Engineering Intern   *Aug 2013 - Jul 2014*
- Worked on the engineering team of the Internal Police Information System.
- Implemented features to address customer's needs under CMMI methodology using Java/JEE stack.
- Improved data access performance of legacy systems by query optimization and cache techniques.

Education

MSc. Computer Science   *Graduation: 2018*
University of British Columbia
- Teaching Assistantship: Introduction to Software Engineering (150+ students per term)
- Thesis: "*Finch: Self-adaptation through control loop injection*". Subjecs: distributed systems, machine learning/AI, control theory, software engineering.

BSc. Computer Science   *Graduation: 2015*
Universidade Salvador
- President of the CS Students' Union
- National Research Scholarship funding for undergraduate research

Skills

Proficient with Python, Java, Go, Javascript, and Typescript	Theoretical and practical Machine Learning
Familiar with Scala, Haskell, C/C++, Ruby, and Rust	Software Testing: TDD, Functional testing, Model-based testing
Distributed systems design	DevOps and SRE methodologies