

Rodrigo Bressan

@bressanrc@gmail.com |  GitHub (rodrigobressan) |  +39 351 747 1323 |  LinkedIn |  Personal Blog

SKILLS

Languages	Go, Python (Django), Java, TypeScript, SQL (MySQL, Postgres), NoSQL (Mongo, DynamoDB, Redis), React
Tools	AWS, Terraform, Docker, Kubernetes, Git, Argo CI/CD
Methodologies	Agile, Scrum, Testing (TDD, Unit Tests, Cypress), Clean Code
Natural Languages	Portuguese (Native), English (Fluent), Italian (Fluent), Spanish (Intermediate)

WORK EXPERIENCE

Team Lead & Senior Software Engineer Contractor - EU and LatAM customers Nov 2022 - Current

- Led the migration of an on-premises project to a Cloud provider (AWS), **reducing operational costs by 15%**
- Provided mentoring of 9 junior and mid-level engineers, enhancing their technical skill and career growth, resulting in part of them receiving promotions during their next performance reviews
- Managed and coordinated a cross-functional team (front-end, backend, DevOps) and communicated with stakeholders (PMs, POs, customers) about the overall project status and deliverables
- Setup and maintained a **monitoring and alerting** system using **AWS CloudWatch, PagerDuty** and **Sentry**
- Improved **API responses by 30%** through the adoption of **caching with Redis** along with **SQL indexes optimization**
- Developed a handwritten text recognition system (OCR) using **Python** along with **AWS Extract** with an accuracy of 80%

Full Stack Engineer Empatica - Italy (Remote) Jul 2020 - Oct 2022

- Built **REST** and **gRPC** APIs with **Go** for customers with mission-critical needs (e.g. NASA, UK Army, US Health and Human Services), deployed on **AWS** and provisioned through **Terraform**, with **over 99.99% of uptime**
- Designed and implemented a **serverless stream processing data lake** with **Python** using a mix of **Lambdas, S3** and **Firehose** replacing an existing solution (**PostgreSQL**) with a more scalable one and reducing costs by around 25%
- Took ownership of several new features and products by coordinating efforts between PMs, developers and data engineers
- Participated on the **hiring** and **onboarding** processes for new engineers, along with **mentoring** of several junior engineers

Software Engineer Bill & Melinda Gates Foundation Jul 2018 - Jun 2020

- **Mentored** software and data engineers on software engineering topics (**clean code, testability, CI/CD, containerization**)
- Setup infrastructure for data engineers, allowing them to quickly test, evaluate and deploy Machine Learning models
- Led the adoption **of multithreading/parallelism** techniques, **improving by 30% the performance of existing ETL pipelines**
- Led the migration of a monolith to **microservices based one**, reducing deployment times by 1/3 of time

Software Developer Cleevio - Czech Republic May 2016 - Dec 2017

- Led the migration of Android apps from **Java** to **Kotlin**, allowing code re-usage across Android and iOS platforms
- Introduced **Test Driven Development** methodology, resulting in quicker iteration cycles between developers and QA
- Defined a set of **architectural models** to be adopted, resulting in more modular and testable components

Software Developer Movable - Brazil Jan 2014 - Jul 2015

- Developed native Android applications, integrating with REST APIs, along with CI/CD to app stores
- Developed an integration between a CMS and 3rd party providers, automating an existing laborious and prone-to-error task

EDUCATION

Computer Science, Federal Institute of Technology of São Paulo (2015 - 2018)

- **Award** for best work on Brazilian Institute for Space Research on the topic of *"Identifying Security Management State of Art using Natural Language Processing"*

- Minor on **Data Science and Artificial Intelligence**, with academic publications on **biometrics and computer vision** areas

Informatics, UNICAMP Technical College (2011 - 2014)

PERSONAL/OPEN SOURCE PROJECTS (More available on personal GitHub)

Ponteltalia ([Live Demo](#))

Developed a full-stack PaaS to allow users to find and locate Italian public records using several Italian public databases along with 3rd party genealogical related datasets (e.g. FamilySearch, GeneaNet)

Tech stack: Go, Python, React, MySQL, AWS

Face2Data ([Source code](#)) - ★ 109 Stars

Extract meaningful information from a person face in less than a second. Powered by Keras and Flask.

Tech stack: Python (Keras framework), React, Keras, TensorFlow, Heroku

Entity Embeddings ([Source code](#)) - ★ 70 Stars

Discover relevant information about categorical data with entity embeddings using Deep Neural Networks

Tech stack: Python (Keras framework), React, Keras, TensorFlow

TMDB Clean Architecture Blueprint ([Source code](#)) - ★ 65 Stars

Showcase of clean architecture concepts along with Continuous Integration and Development for modular Android applications. Includes test suits (functional and unit tests) along with code coverage.

Tech stack: Java, Kotlin, Android SDK, SQLite, Travis CI/CD

DigiPathos ([Source code](#)) - ★ 39 Stars

Brazilian Agricultural Research Corporation (EMBRAPA) fully annotated dataset for plant diseases. Plug and play installation over PiP with an easy-to-use CLI tool

Tech stack: Python

PADify ([Source code](#)) - ★ 17 Stars

Built a Python framework to perform PAD (Presentation Attack Detection) on Facial Recognition systems through intrinsic properties (e.g. depth, illumination) along with Convolutional Neural Networks

Tech stack: Python, TensorFlow, Keras

PERSONAL INTERESTS & HOBBIES

- **Academic Research:** biometrics, computer vision, public healthcare
- **Software Craftsmanship:** clean code, system design, software architecture
- **Language Learning**
- **Outdoor Activities:** climbing, windsurfing, sailing, road cycling