Otavio Ribas

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Education

Ecole Polytechnique de Paris
Engineering Degree

September 2022 — August 2025
Palaiseau, France

GPA 3.8/4.0   **Excellence Scholarship** Fulgence Bienvenüe in recognition of academic results.
Relevant Courses: OOP in Java, Probability, Statistics, Real & Numerical Analysis, Introduction to Economics, Microeconomy

Aeronautics Institute of Technology
Bachelor in Computer Engineering

January 2019 — December 2021
São José dos Campos, Brazil

Grade 8.9/10.0   **#2 Engineering School in Brazil** according to the ENADE.
Relevant Courses: Introduction to Computer Science in C, Data Structures and Algorithms I and II, Fundamentals of Artificial Intelligence, Control, Computational Mathematics, Computational Linear Algebra, Calculus I to IV, Ordinary and Partial Differential Equations, Time Series Analysis, Fundamentals on Software Engineering, Databases

Publications

O. H. R. Guimarães, M. R. O. A. Maximo and J. M. P. d. Oliveira, **Comparison of Encoder-Decoder Networks for Soccer Field Segmentation**, 2023 Latin American Robotics Symposium (LARS), 2023 Brazilian Symposium on Robotics (SBR), and 2023 Workshop on Robotics in Education (WRE), Salvador, Brazil, 2023, pp. 496-501, doi: 10.1109/LARS/SBR/WRE59448.2023.10333063. **Awarded as Best Paper on the LARS 2023.**

Professional Experience

TINO
Software Engineer Intern

February 2022 — June 2023
São Paulo, Brazil

- **Extended** and maintained the internal system of **100k+ lines of code**, distributed across more than **20** microservices.
- **Developed** the communication system used for sending automated messages to more than **1000** clients.
- **Created** an interface to be used by **more than 20 colleagues** from the operations team to access relevant data and metrics for specific clients, consumed from **5 different APIs**.
- **Optimized** routines from said interface, implementing parallel calls that made them **2x faster** for larger data**.**
- **Prepared** over **10** Metabase views containing **core metrics** for the business.

Radix Portfolio
Software Engineer Intern

June 2021 — December 2021
São Paulo, Brazil

- **Built** an MVP for the new asset analysis automation system, building a JavaScript program for Google Apps Script and integrating it with the Pipefy platform.
- **Wrote** scripts for automating core tasks of the business, cutting the time spent on them by **more than 90%**.
- **Programmed** a script for scraping **500+ pages** of public documents.

Academic Projects

ITAndroids

Humanoid Team (Mars 2019 - July 2022)
- **Replaced** the state machine, implemented in C++ and applied in the robot's decision-making, by a Behavior Tree.
- **Adapted** and containerized the team software with Docker for virtual competitions in 2021.
- **Teached** state machines and behavior trees to freshmen during **2 consecutive years**.

Research Project (August 2020 - October 2021)
- **Researched** the semantic segmentation for computer vision using encoder-decoder neural networks, comparing the efficacy of 14 ML models in segmentation of the soccer field and its lines.

Skills

Python (Pandas, Scikit Learn, Tensorflow, Numpy)
JavaScript (React, Express)
C/C++ - Go - Java - Julia - SQL
Bash - Docker - Google Cloud- MongoDB - Terraform - Excel

Languages

English - C2
French - C1 (certified by the TCF)
Spanish - B1
Portuguese - Native