Ricardo Ribeiro

 in [LinkedIn](#) | ▪ +351910629639 | 🌐 [Personal Website](#) | ✉ ricardonunosr@gmail.com | ○ [GitHub](#)

Hi, my name is Ricardo, I'm a generalist programmer (with a tendency to low-level like 3D, compilers, ...) if it needs to be done I'm up for the challenge. I'm able to learn quickly, navigate complex code bases and try to simplify it.

Interests: systems prog, performance, tooling, DOD, everything real-time 3D, C, Zig,...

TECHNICAL SKILLS

Languages: C, C++, Go, Python, Java, SQL (Postgres), OpenGL, Google Test
Frameworks: Spring, Apache Airflow
Developer Tools: Linux, Git, Docker, Kubernetes, Ansible, Bazel

EXPERIENCE

Software Engineer - Autonomous Driving Lateral Features   Mar. 2023 – Now
CriticalTechworks (BMW)   *Lisbon, Portugal*
- Helped develop Active Lane Guiding feature for level 2+ systems
- Created solution for running the Testing Framework locally with knowledge for my prior project
- Assisted in the creation of tools for trace analysis of drives, enabling a faster iteration for developers
- **Tech:** C, C++, Python, Docker, GTest

Software Engineer - Autonomous Driving Testing Framework and Service   Feb. 2022 – Mar. 2023
CriticalTechworks (BMW)   *Porto, Portugal*
- Helping build reprocessing platform for Autonomous Driving for BMW
- Implemented a new feature for managing issues on car logging sessions to save all developers' reprocessing time
- Worked on a Postgres mirror from MaprDB using Foreign Data Wrappers, improve logging on an open-source postgres extension in C. Introduced static type checking improving Python Airflow code quality
- **Tech:** Java Spring Backend, C++ Automotive (CAN, ETH, FlexRay...), Python, Apache Airflow, Ansible, Helm, Openshift, Zull CI, Docker, PostgreSQL, MaprDB, Grafana, Prometheus

Software Engineer Intern   Feb. 2020 – June 2020
Faro Technologies   *Porto, Portugal*
- Designed system from scratch for a back office web app to manage product life cycle of desktop apps
- Developed frontend, backend and database modeling
- **Tech:** React (Typescript), .NET Core, EF Core, Docker

PROJECTS

3D Engine | *C++, OpenGL*
- 3D engine capable of doing basic rendering, framebuffers, lighting
- OBJ loading using tinyobjloader
- Custom arena allocator and math library
- Using ImGui, Cmake, GLFW

Self Driving Toy | *Python, Arduino*
- Implemented Python Kivy Server on Android
- Arduino Motor controller
- Basic Motion Control using Otsu Binarization

Greenlight API | *Go, Postgres*
- Implemented a REST API in golang for managing movies

EDUCATION / CERTIFICATES

Machine Learning Specialization   July 2022
Coursera

Bachelor of Informatics Engineering   Sep. 2017 – Feb 2021
Instituto Superior de Engenharia do Porto   *Porto, Portugal*

IELTS Certificate   June 2021
British Council   *Porto, Portugal*