

MIGUEL LOURENÇO

miguel.al.lourenco@gmail.com

Github ◇ **Personal Website** ◇ **Itch**

Lisbon ◇ Portugal

SUMMARY

Game and Software developer passionate about writing efficient code in low-level languages such as C/C++. Focused especially on working and learning about embedded systems, video-game development and rendering due to the intricacies that low resource and time restricted systems, such as these bring.

Friendly, communicative, level-headed, a team-player who likes taking challenges head-on and above all, a person who loves to learn.

SKILLS & ABILITIES

- Proficient with **C/C++**. Knowledgeable in **C#**, **Java** and **Python**.
- Knowledgeable in **Unreal Engine**, **Unity**, **OpenGL**, **FreeCAD**, and **AWS**.
- Basic experience with **Networks**, **Security** and **Distributed Systems**.
- Work experience using **SQL** and **NoSQL** databases.
- Work experience in a **AGILE** environment. **Scrum** and **Kanban** specifically.

PROFESSIONAL EXPERIENCE

Grip Studios

Game/Software Developer

January 2023 - Present

Czechia & Portugal

- **C++**, **Unreal Engine**
- Internal projects in UE5 - Gameplay and Tool development
- External AAA project under NDA - Live Services and Tool development

Critical Software

Software, Embedded and Cloud Developer

October 2021 - December 2022

Portugal & UK

- **C/C++**, **C#**, **Python**, **AWS Lambda**, **DDB** and **API Gateway**, **AGILE**
- Cloud based website for testing EV chargers.
- Desktop program to validate Smart Energy Meters.
- Automated the testing pipeline, tested and validated Smart Energy Meters.

Inetum

Full-Stack Developer

February 2021 - September 2021

Portugal

- **Java**, **Spring**, **Hibernate**, **SQL/Oracle DB**, **AGILE**
- Developed and maintained software that aims to help insurance companies keep track of their clients and contracts.

PERSONAL PROJECTS

Ray Tracer

2024

- **Jai, Rendering**
- Developed a multi-threaded physically-based Ray Tracer program in Jai that generates scenes with spheres and planes with diffuse, dielectric, emissive and metallic materials.

OpenGL rendering engine

2024

- **C++, OpenGL**
- Created a rendering engine with various scenes. Each scene was to study and develop various topics about the rendering pipeline and techniques.
- Implemented: .obj loading, random terrain with texture blending, dynamic tessellation, anti-aliasing and shadows.

Arduino Clock

2022

- **C++, Arduino**
- Designed and coded to improve my skills and for fun. Provides a 24h clock, temperature sensor and alarm.

EDUCATION

Faculty of Sciences of the University of Lisbon

MSc Degree in Computer Science Engineering

Sept. 2018 - Dec. 2020

Lisbon, Portugal

- Specialization in Networks, Architectures and Distributed Systems.
- Master Thesis: Data Management for Cloud Supported Cooperative Driving.
- Avg. 16/20

Faculty of Sciences of the University of Lisbon

BSc Degree in Computer Science Engineering

Sept. 2015 - June 2018

Lisbon, Portugal

- Avg. 14/20

EXTRA-CURRICULAR

Game jams

- Acquired the capability to work under pressure, with a team, manage feature scopes and estimates and deliver a minimum viable product under a short time frame.

Scouts Volunteer & Summer Camp Monitor

Volunteering

2009 - 2022

Mafra, Portugal

- Acquired the capability to lead, share ideas and knowledge and work in a group.

Robotics Teacher

Part-time

2018 - 2020

Mafra, Portugal

- Robotics Teacher for children from 1st to 4th grade using LEGO EV3 MINDSTORMS with block programming.

LANGUAGES

Portuguese - Native **English** - Proficient **French** - Limited