

José Fernandes

Software Engineer

Info

✉ josefernandesdev@gmail.com

📍 Braga, Portugal

🌐 josé-fernandes

Languages

🇵🇹 (Portuguese - Native Language)

🇬🇧 (English - Fluent)

Programming Languages

C C++ GLSL Python

Tools/Frameworks/API

OpenGL CUDA OpenMP OpenMPI
PThreads ImGui CMake Linux Git

Technical Skills

Multithreading Raytracing Shaders
3d Math Algorithms Low Level Programing
Profilling Benchmarking Data-Structures

Activities

- Inter-University Programing Marathon, 2017
- Heartbits Hackathon, 2017
- Hackivate Hackathon, 2018
- MAD Game Jam ESMAD, IPP, 2020

Other Interests

- Bouldering
- Hardware
- Swimming
- Reading

Portfolio

Check out my portfolio at felfit.github.io or with the QR code.



WORK EXPERIENCE

Aug 2022 -
Today

C++ Engineer

ExeedMe

📍 Remote

Assisted in research and development on Blockchain technology. Implemented C++ libraries and optimized new cryptographic algorithms

Technology/Tools: C++ , CMake , Perf , Boost

EDUCATION

2016-2022

Integrated Masters in Informatics Engineering

📍 Braga, Portugal

Minho University

Computer Informatics, Software Engineering

Specialization: Parallel and Distributed Computing and Computer Graphics

Computer Graphics: Shaders, Computer Vision, Ray-traced Global Illumination

Parallel and Distributed Computing: GPU and CPU Architectures, benchmarking, profiling, multithreading, instruction level parallelism, working on a distributed cluster environment

Bachelors: Algorithms and Complexity, Algebra, Calculus, Databases, Distributed Systems, Object-Oriented, Imperative and Functional Programming

Grade Average: 17/20

Dissertation Grade: 18/20

HIGHLIGHTED UNIVERSITY PROJECTS

Masters Thesis

Real Time Rendering of Particle Based Fluids

This project saw the implementation of 2 techniques for rendering fluids:

- a screen-space implementation for fast performance with good visual fidelity

- a voxel-based implementation with raytraced reflections, refractions and real-time caustics

Technologies: C++ , GLSL , OpenGL , Python , ImGui

Industry Collaboration

Accenture - Fleet Management Software

Agile project for supervised by Accenture in a 12 man team for university during my masters with the intent to prepare us to the business world.

Worked on a Python simulator which would create big amounts of realistic data for testing the application which interfaced with GCP through Pub/Sub.

Project finished with good feedback from project owner and professors.

Technologies/Tools: Python , GCP , Google Firestore