

Braga, Portugal

Diogo Gonçalves

+351 933777932
diogo.goncalves@gmail.com
goncalves-diogo.me

Employment

Bsolus

October 2020 – Present

Software Engineer

- Designed and developed a Marketing Automation system based on a microservices architecture with horizontal scalability. Development the CI/CD pipeline integrating with the Google Cloud Platform.
- Maintained E-commerce platforms.
- Technologies utilized included: NestJs, TypeScript, PHP, SQL, MongoDB, Terraform, GCP, Bitbucket, Jira, Git.

Education

University of Minho

2016 – Present

- Master's degree in Informatics Engineering specialized in Computer Graphics and Parallel and Distributed Computing.
- Bachelor's degree in Informatics Engineering, July 2019.

Technical Experience

Projects

- **Interactive Wind** (2020). Developed a real time realistic wind simulation in GLSL. Focus of the project was to research known implementations of wind interaction with multiple objects and combine them into a realistic solution to integrate with an engine using shaders.
- **Procedural Terrain Generation** (2019-2020). Developed a real time procedural physically accurate terrain generator. Focus of the project was to use well know graphical algorithms like Perlin noise and combine them into a procedural terrain generator using shaders.
- **3D Engine** (2021 - Current). Developed a 3D Engine that supports the creation of 3D shaders pipelines. It integrates both rasterization and ray tracing. Increased skills in C++ and MSDN.
- **Ray tracer** (2020 - Current).

Technical skills

- **Advanced** C++; C; GLSL; Python; TypeScript
- **Intermediate** Bash; Lua; Vimscript; Javascript; Nestjs; SQL;
- **Basic** Haskell; Prolog; Flex/Yacc;

Languages

- Portuguese - Native speaker
- English - C1 level