

Braga, Portugal

# Diogo Gonçalves

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## Employment

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### Bsolus

October 2020 – Present

Software Engineer

- Designed and developed a Marketing Automation system based on microservices workflow orchestration using BPMN 2.0.
- Constructed the CI/CD pipeline for the system.
- Maintained E-commerce platforms.

## Education

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### 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

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### 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

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

## Languages

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- Portuguese - Native speaker
- English - C1 level