# **Diogo Almeida**

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diogohalmeida.github.io

#### **ABOUT ME**

I am an ambitious and passionate software engineer proficient in various technologies who relishes solving problems by crafting efficient, reliable, and maintainable solutions. Always eager to learn and grow, I am committed to staying current with the best practices and latest advancements in the ever-evolving world of technology.

#### **EXPERIENCE**

# **Critical Techworks | BMW Group**

Sep 2023 – present Porto, Portugal

Software Engineer

- Working as a full stack software engineer on Cloud Data Hub: BMW Group's data lake platform.
  - Developed an interface for database fine-grained access control, a feature estimated to save BMW over \$1 million annually in AWS storage costs.
- Technologies: React, Typescript, GraphQL, Node.js, Python, AWS, Terraform.

#### **Formula Student FEUP**

**Driverless Department Member** 

Nov 2022 - Aug 2023 Porto, Portugal

- Designed and implemented the perception module of the 2023 autonomous vehicle. The team obtained the following achievements:
  - Best Newcomer EV Trophy Formula Student UK 2023;
  - Business Plan Trophy Formula Student UK 2023.
- Technologies: Python, PyTorch, YOLO, ROS 2.

#### Electronics & Software Department Member

Jul 2021 - Oct 2022

Porto, Portugal

- Conducted research on CAN bus and embedded systems for the 2022 concept vehicle. The team obtained the following achievements:
  - 1st Place Concept Class Formula Student UK 2022;
  - Engineering Design Trophy Formula Student UK 2022;
  - 2nd Place Concept Class Formula SAE Italy 2022.
- Technologies: Embedded C.

# **EDUCATION**

#### Master's Degree in Informatics and Computing Engineering

2021 - 2023

Faculty of Engineering of the University of Porto

Porto, Portugal

Final grade of 18/20 values.

#### Erasmus+ Mobility Program - Master's Degree in Artificial Inteligence

Sep 2022 – Feb 2023

University of Bologna

Bologna, Italy

Final grade of 18/20 values.

#### **Bachelor's Degree in Informatics and Computing Engineering**

2018 - 2021

Faculty of Engineering of the University of Porto

Porto, Portugal

Final grade of 17/20 values.

#### **PUBLICATIONS**

# SIT6: Indirect touch-based object manipulation for DeskVR @

D. Almeida, D. Mendes, and R. Rodrigues, "SIT6: Indirect touch-based object manipulation for DeskVR," Computers & Graphics, vol. 117, pp. 51–60, 2023, doi: https://doi.org/10.1016/j.cag.2023.10.013.

#### **PROJECTS**

# News Web App *⊘*

Database and Web Applications Laboratory Course

- Implementation of a news forum (similar to Reddit) for gaming.
- Technologies: HTML, CSS, Bootstrap, Laravel, JavaScript.

# Compiler for Java-- (subset of Java) ∅

**Compilers Course** 

- Implementation of a programming language parser, along with lexical and semantic analysis.
- Technologies: Java, JavaCC, Jasmin.

# **Distributed Backup Service ⊘**

**Distributed Systems Course** 

- Implementation of a peer-to-peer file storage service.
- Technologies: Java, Java RMI.

#### **SKILLS**

# **Programming Languages**

Python, TypeScript, JavaScript, Go, Java, C#, C++, C

#### **Databases**

MySQL, PostgreSQL, MongoDB

#### **Technologies**

React, Node.js, GraphQL, RabbitMQ

#### **Tools and Services**

Git, Docker, AWS, Terraform

#### **LANGUAGES**

**Portuguese** — Native | **English** — Full Professional Proficiency - C2