

# Diogo Almeida

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🔗 diogohalmeida.github.io

## ABOUT ME

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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

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### Critical Techworks | BMW Group

Sep 2023 – present

#### Software Engineer

Porto, Portugal

- 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.
  - Created a web platform to simplify script execution for the first-level support teams, allowing them to address common user issues more efficiently.
- 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

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### 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 Intelligence

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

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### 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

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### 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

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### Programming Languages

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

### Technologies

React, Node.js, GraphQL, RabbitMQ

### Databases

MySQL, PostgreSQL, MongoDB

### Tools and Services

Git, Docker, AWS, Terraform

## LANGUAGES

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