Daniel **Pereira**

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First year computer science and engineering masters student looking for a position where I can utilize my skills, problem-solving abilities, and expand on my knowledge

Education

Bachelors of Engineering in Computer Science and Engineering *2021 - 2024*
University of Minho, Braga *Portugal*

- Course: Database Systems | Computer Networks | Web Engineering | Distributed Systems | Algorithms and Data Structures

Masters of Engineering in Computer Science and Engineering *2024 - Present*
University of Minho, Braga *Portugal*

Experience

Research Assistant *Jul 2024 - Present*
Distributed Storage Group @ HASLab *Braga, PT*

- Conducted research on **resource disaggregation** for LSM Tree key-value stores, focusing on improving **scalability** and **storage efficiency**
- Studied **existing implementations** of disaggregated storage and compute solutions for LSM Tree architectures
- Modified and extended **RocksDB** by implementing and testing experimental middleware solutions aimed at optimizing **remote storage interactions**
- Evaluated performance impacts, bandwidth utilization, and scalability effects through **benchmarking** and **profiling**

Software Engineering Intern *Jul 2023 - Sep 2023*
Checkmarx *Braga, PT*

- Developed new features and tests to the SAST product by providing support for new language syntax features in a **C#** environment
- Integrated an agile development team
- Experienced a production development pipeline

Mentor & Responsible of Technology *Sep 2023 - Sep 2024*
CoderDojo Braga *Braga, PT*

- Developed, maintained and deployed the CoderDojo Braga web platform with a REST API written in **Elixir** and **Phoenix** and a front end developed in **Next.js**
- Wrote software tests for the backend
- Performed code reviews for new features
- Mentored young individuals aged 7-17 in programming

Co-Director *Sep 2022 - Sep 2024*
CeSIUM (Software Engineering Students Association of UMinho) *Braga, PT*

- Integrated a team of 5 elements developing, maintaining and deploying multiple open source repositories
- Worked on full-stack repos written in **Elixir** and **Phoenix LiveView**
- Hosted the CeSIUM *Periférico* podcast
- Organized workshops, activities, and managed a team of volunteers in the Pedagogical Department
- Led the successful implementation of CodeWeek 22' to onboard new students

Projects

BugsByte Hackathon 2024 *Nov 2023 - Apr 2024*
CeSIUM *Braga, PT*

- Was a general organizer of the BugsByte Hackathon 2024
- Managed a budget of thousands of euros
- Coordinated cross-functional teams to execute various aspects of the hackathon
- Increased the event's size by two times compared to the previous year
- Worked alongside Uphold as the main sponsor of the event
- Fully developed the BugsByte Hackathon website

Skills

Tech Stack	Elixir	Golang	C/C++	Java	Python	Haskell	SQL (Postgres, MySQL)	RocksDB
Tools	Git	Docker	K8s
Languages	Portuguese (fluent)	English (fluent)
Personal Interests	Jiu Jitsu	Cello	Reading