## Simão Pedro Sá Cunha

MSc in Informatics Engineering

Date of Birth: January 7<sup>th</sup>, 2001 Location: Vila Nova de Famalicão - Braga, Portugal

#### **EDUCATION**

# •Informatics Engineering (Integrated Master's)

University of Minho, Braga, Portugal

2019-2024

#### •Basic and Secondary Education

Escola Cooperativa Vale S. Cosme - Didáxis, Vila Nova de Famalicão, Portugal

2012-2019

## WORK EXPERIENCE

#### •Invited Assistant Professor

Feb 2025 - Present Braga, Portugal

 $University\ of\ Minho$ 

•Summer Internship

Jul - Sep 2023

Bosch Portugal

Braga, Portugal

- Applied machine learning and deep learning techniques to develop a system for detecting delaminations.
- Implemented machine learning models using Python libraries such as Scikit-learn (Sklearn) and deep learning models using Deep Learning Halcon by MVTEC to build robust detection algorithms.
- Conducted image processing tasks using Halcon from MVTEC to enhance data preprocessing.
- Contributed to internal software development projects.
- Gained foundational knowledge in computer vision.

•Summer Internship

Jul - Aug 2022

Accenture Portugal

Braga, Portugal

- Introduction to Google Cloud Platform.
- Data Fusion instance creation and JSON file upload with a customized pipeline configuration in a Cloud Build file written in YAML.
- Agile Scrum Methodology applied in the entire internship.

### LANGUAGES

Portuguese: Native English: C1 - Advanced

# **SKILLS**

Programming Languages: C, C++, Java, JavaScript, Python, Haskell, Prolog

Frameworks: React Native

Web Development Tools: Node.js, VSCode, Git, GitHub

Cloud and DevOps: Google Cloud Platform, Firebase, Docker, Ansible

Databases: SQL, MySQL

Business Intelligence: Microsoft PowerBI

Areas of Interest: Large Language Models, Machine Learning, Green Software, Image Processing, Computer Vision

#### ACTIVITIES

## •CECAM-Lorentz workshop "Greening AI with Software Engineering"

Feb 2025

CECAM-HQ EPFL

Lausanne, Switzerland

# •Cerciras Training School 2024

Aug 2024

Jan 2024

Cerciras - Connecting Education and Research Communities for an Innovative Resource Aware Society Klagenfurt, Austria

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#### •1st UMinho Research & Innovation Open Days 2024

University of Minho

Braga, Portugal

#### •Sustrainable Summer School 2023

Jul 2023

University of Coimbra

Coimbra, Portugal

### **PUBLICATIONS**

- Simão Cunha, Luís Silva, João Saraiva, and João Paulo Fernandes. 2024. **Trading Runtime for Energy Efficiency: Leveraging Power Caps to Save Energy Across Programming Languages**. Proceedings of the 17th ACM SIGPLAN International Conference on Software Language Engineering (SLE '24), October 20–21, 2024, Pasadena, CA, USA. ACM, New York, NY, USA, 13 pages. https://doi.org/10.1145/3687997.3695638
- Luís Maia, Marta Sá, Inês Ferreira, Simão Cunha, Luís Silva, Paulo Azevedo, and João Saraiva. 2024. On the Impact of PowerCap in Haskell, Java, and Python. RAW'24: 3rd Workshop on Resource Awareness of Systems and Society, July 02–05, 2024, Maribor, Slovenia. https://ceur-ws.org/Vol-3867/paper4.pdf

## **CERTIFICATES**

# •CECAM-Lorentz workshop "Greening AI with Software Engineering" $CECAM-HQ\ EPFL$

Feb 2025

Lausanne, Switzerland

- Attendance Certificate

# •1st UMinho Research & Innovation Open Days 2024 - Pitch and Poster Session

Jan 2024

 $University\ of\ Minho$ 

Braga, Portugal

- Pitch Session Certificate
- Poster Session Certificate

## •Sustrainable Summer School 2023 - Students Workshop and Poster Session

 $Jul \ 2023$ 

University of Coimbra

Coimbra, Portugal

- Attendance Certificate
- Students Workshop and Poster Session Certificate

•English C1Oct 2021BabeliUMBraga, Portugal

- Certificate