


Simão Pedro Sá Cunha


MSc in Informatics Engineering


Date of Birth: January 7th, 2001

Location: Vila Nova de Famalicão - Braga, Portugal

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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

•Teaching Assistant

University of Minho

Feb 2025 - Present

Braga, Portugal

– Courses taught:

- * Topics of Software Development
- * Experimentation in Software Engineering

•Informatics Teacher

Requião Primary School and Vale S. Martinho Primary School

Mar 2025 – Jun 2025

Vila Nova de Famalicão, Portugal

- Taught IT basics to 2nd, 3rd, and 4th grade students using Microsoft PowerPoint and Word
- Taught programming basics with the Scratch platform

•Summer Internship

Bosch Portugal

Jul - Sep 2023

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

Accenture Portugal

Jul - Aug 2022

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"

CECAM-HQ EPFL

Feb 2025

Lausanne, Switzerland

•Cerciras Training School 2024

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

Aug 2024

Klagenfurt, Austria

•1st UMinho Research & Innovation Open Days 2024

University of Minho

Jan 2024

Braga, Portugal

•Sustainable Summer School 2023

University of Coimbra

Jul 2023

Coimbra, Portugal

PUBLICATIONS

- Luís Cruz, João Paulo Fernandes, Maja Hanne Kirkeby, Silverio Martínez-Fernández, June Sallou, Hina Anwar, Enrique Barba Roque, Justus Bogner, Joel Castaño, Fernando Castor, Aadil Chasmawala, Simão Cunha, Daniel Feitosa, Alexandra González, Andreas Jedlitschka, Patricia Lago, Ana Oprescu, Pooja Rani, João Saraiva, Federica Sarro, Raghavendra Selvan, Karthik Vaidhyanathan, Roberto Verdecchia, Ivan P. Yamshchikov, & Henry Muccini. 2025. **Greening AI-enabled systems with software engineering: A research agenda for environmentally sustainable AI practices**. arXiv. <https://arxiv.org/abs/2506.01774>
- 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"** *Feb 2025*
CECAM-HQ EPFL Lausanne, Switzerland
– Attendance Certificate
- **Cerciras Training School 2024** *Aug 2025*
University of Klagenfurt Klagenfurt, Austria
– Attendance Certificate
- **1st UMinho Research & Innovation Open Days 2024** *Jan 2024*
University of Minho Braga, Portugal
– Pitch Session Certificate
– Poster Session Certificate
- **Sustainable Summer School 2023** *Jul 2023*
University of Coimbra Coimbra, Portugal
– Attendance Certificate
– Students Workshop and Poster Session Certificate
- **English C1** *Oct 2021*
BabeliUM Braga, Portugal
– Certificate