Simão Pedro Sá Cunha

MSc in Informatics Engineering

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

 simaocunha71   simaocunha71   simaopscunha@outlook.pt   simaocunha71.github.io

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*
University of Minho   Braga, Portugal
  – Courses taught:
    * Topics of Software Development
    * Experimentation in Software Engineering

•Informatics Teacher   *Mar 2025 – Jun 2025*
Requião Primary School and Vale S. Martinho Primary School   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   *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*
Cerciras - Connecting Education and Research Communities for an Innovative Resource Aware Society   Klagenfurt, Austria

•1st UMinho Research & Innovation Open Days 2024   *Jan 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"**　　　　　　　　*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

- **Sustrainable 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