Hugo Afonso Da Gião

Personal Details

Phone: (351) 939444506
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Education

**BSc in Computer
Science**

📅 *2016–2019*
University of Minho
Graduated with a final grade of 13/20.

MSc in Informatics Engineering
📅 *2019–2022*
University of Minho
Graduated with a final grade of 17/20.

PhD in Informatics Engineering
📅 *2022–Present*
Faculty of Engineering, University of Porto
Currently enrolled doctoral student.

Research Experience

Master Thesis

📅 *Sep 2020 – Jan 2022*
LPBlocks – A Block-based Language for Linear Programming
Supervised by Jácome Cunha, co-supervised by Rui Pereira.

- Developed a visual programming language for linear programming using block-based paradigms.

Research Assistant at HASLab / INESC TEC

📅 *Jul 2021 – Jan 2022*

- Worked on a grant to design a visual language for linear programming.

- Developed a user-friendly, block-based interface to make LP more accessible.

- **Publications:**

    - *Linear Programming Meets Block-based Languages* — Hugo Gião, Rui Pereira, Jácome Cunha (VL/HCC 2021)

    - *Towards a Block-based Language for Linear Programming?* — Hugo Gião, Rui Pereira, Jácome Cunha (INForum 2021)

Researcher at HASLab / INESC TEC

📅 *Feb 2022 – Present*

- Researched the integration of CI/CD practices with Model-Driven Engineering (MDE).

- Mined open-source repositories to analyze CI/CD practices.

- Designed a validated metamodel to represent CI/CD pipelines.

- Developed a block-based language aligned with the metamodel.

- **Publications & Submissions:**

    - *A Model-Driven Approach for DevOps* (VL/HCC 2022)

    - *A Meta-Model to Support the Migration and Evolution of CI/CD Pipelines* (INForum 2024)

- *CI/CD Meets Block-Based Languages* (VL/HCC 2023)

- *A Metamodel for Reengineering CI/CD Pipelines* (Accepted to MODELS 2025)

- *Model-Driven Approaches for DevOps: A Systematic Literature Review* (In submission)

- *Chronicles of CI/CD: A Deep Dive into its Usage Over Time* (In submission)

- *PipeBlocks: A Block-based Environment for CI/CD* (In submission)