Daniel Pinho

About Me

I am a PhD student getting my degree at the University of Porto, with my current research being focused on the relationship between low-code software development and developer experience. Other related research topics of interest include agile software development, user experience, and software patterns.

In addition to my current PhD research, my interests are quite broad: my Master's thesis combined software engineering with the presence of soft skills, and I also enjoy performing activities related to graphic design and organising events. My skill-set encompasses several fields showcasing this versatility, including software development, visual design, understanding of agile practices and guiding teams on applying them, and various soft skills.

Education

2015–2020 **BSc** + **MSc**, Faculty of Engineering, University of Porto, Porto, Portugal, Integrated Master in Informatics and Computing Engineering.

My Master's dissertation combined the topics of communication, agile methodologies and patterns. In my work, I gathered information about effective communication in agile software development contexts, identifying good practices and common solutions to increase the quality of existing communication and collaboration. These practices were then sorted out into three categories: environment patterns, activity patterns, and people patterns.

2020– **PhD**, Faculty of Engineering, University of Porto, Porto, Portugal, Doctoral Programme in Informatics Engineering (PhD).

My current research work focuses on the topic of developer experience in low-code software development contexts. This work is being supervised by Professor Ademar Aguiar from the University of Porto and Professor Vasco Amaral from the NOVA University of Lisbon.

Professional Experience

2020- **Invited Assistant Lecturer**, *Faculty of Engineering, University of Porto*, Porto, Portugal.

The courses I've taught all fall under the software engineering umbrella of topics. In the 2020/21 academic year, I taught courses on agile software development methodologies and software systems architecture. Currently, I am involved in large-scale software development and software engineering courses.

- 2021- PhD Researcher, INESC TEC, Porto, Portugal.
- 2020–2021 Researcher, Faculty of Engineering, University of Porto, Porto, Portugal.

Languages

Portuguese Native

English Proficient

Additional Training Experience

2022 **Transferable skills for engineering: basic teaching skills**, *Faculty of Engineering, University of Porto*, Porto, Portugal, Final grade: 18/20.

This course taught me to think in a more pedagogical sense when preparing and teaching classes. I learned how to prepare a course syllabus in a way that gives students ownership of their learning processes, in addition to providing them with more interesting and engaging classes.

Knowledge Areas

Technical HTML, CSS, C++, Java, JavaScript

- Visual Design Adobe Illustrator, Adobe Lightroom, Adobe InDesign, Affinity Designer, Affinity Publisher, Procreate
 - Soft Skills Public speaking, leadership, time management, project management, working under pressure, teamwork, communication

Volunteering

- 2018-2020 **Member**, BEST Porto. BEST Porto is a local group of the Board of European Students of Technology, which is a non-profit, non-governmental student organisation spread across 32 European countries that aims to develop students across the continent.
- 2019-2020 **Marketing Coordinator**, BEST Porto. Coordinated one of the local organisation's departments, provided support for event core team members, managed the organisation's image, and assisted with training organisation members' hard skills regarding this area.
- 2018-2019 **Core Team Secretary**, *BEST Course 'How I Met Your City'*, BEST Porto. Managed the timeline for a ten-month project, maintained written records of team activities, and managed the organisation's HR during the event.
 - 2018 Marketing Responsible, *SciTeCh 2018*, BEST Porto. Managed the image and promotion of an event, overhauled its visual identity, and managed several supporting smaller teams.

Publications and Works

- 2024 Affective and Conative Patterns for Developer Experience, *authored by Daniel Pinho, Ademar Aguiar, and Vasco Amaral*, in Conference on Pattern Languages of Programs, People and Practices 2024 (in publication).
- 2024 **Cognitive Patterns for Developer Experience**, *authored by Daniel Pinho, Ademar Aguiar, and Vasco Amaral*, in European Conference on Pattern Languages of Programs 2024.
- 2024 Validating Pattern Languages: A systematic literature review, *authored by Francisca Almeida, Daniel Pinho, and Ademar Aguiar*, in European Conference on Pattern Languages of Programs 2024.
- 2023 **Patterns for Low-Code Developer Experience**, *authored by Daniel Pinho, Ademar Aguiar, and Vasco Amaral*, in Conference on Pattern Languages of Programs 2023.

- 2022 What about the usability in low-code platforms? A systematic literature review, *authored by Daniel Pinho, Ademar Aguiar, and Vasco Amaral*, in Journal of Computer Languages.
- 2021 Mining Good Practices of Low-Code Software Development from Model-Driven Approaches, authored by Daniel Pinho, Ademar Aguiar and Vasco Amaral, in 28th Conference on Pattern Languages of Programs.
- 2020 Effective Communication in Agile Teams: A Pattern Language, authored by Daniel Pinho, MSc Dissertation.
- 2020 **The AgilECo Pattern Language: Physical Environment**, *authored by Daniel Pinho and Ademar Aguiar*, in European Conference on Pattern Languages of Programs 2020.

Conference Organising

- 2024 **31th Conference on Pattern Languages of Programs, People and Practices**, *PLoP 2024*, Student Volunteer.
- 2023 **30th Conference on Pattern Languages of Programs**, *PLoP 2023*, Student Volunteer.
- 2022 6th International Conference on the Art, Science, and Engineering of Programming, (*Programming*) 2022, Student Volunteers Co-Chair.
- 2021 **28th Conference on Pattern Languages of Programs**, *PLoP 2021*, Virtualization Co-Chair, Proceedings Co-Editor.
- 2021 **16th Doctoral Symposium in Informatics Engineering**, *DSIE 2021*, Organiser, Responsible for Catering and Social Events.

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