

About Me

I am a PhD student and researcher based in Porto, Portugal. My work centers on the human side of software engineering, investigating the diverse factors that influence a developer's daily experience and team interactions. My specific research interests lie in agile software development, developer experience, and usability, culminating in my current PhD research: documenting a comprehensive pattern language aimed at systematically improving the developer experience faced by software professionals.

Education

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

My current research work focuses on the topic of developer experience patterns. This work is being supervised by Professor Ademar Aguiar from the University of Porto and Professor Vasco Amaral from the NOVA University of Lisbon. From October 2021 to September 2025, I was supported by a PhD research grant (reference: 2021.08371.BD) from FCT - Fundação para a Ciência e Tecnologia.

2022 **Transferable skills for engineering: basic teaching skills (Certification)**, *Faculty of Engineering, Faculty of Porto*, Porto, Portugal

This additional training 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.

2015–2020 **Integrated Master's in Informatics and Computation Engineering (BSc + MSc)**, *Faculty of Engineering, Faculty of Porto*, Porto, Portugal

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 environment, activity, and people patterns.

Professional Experience

2020–Present **Invited Assistant Lecturer**, *Faculty of Engineering, Faculty of Porto*, Porto, Portugal

2020–2021 **Researcher**, *Faculty of Engineering, Faculty of Porto*, Porto, Portugal

I worked on a research project related to a low-code software development platform. My duties in this project related to implementing a text-based paradigm that enabled users to perform development tasks by describing relevant aspects. This research grant (reference: POCL-01-0247-FEDER-039661) was supported by FEUP under the project Portugal 2020.

Languages

Portuguese	Native	
English	C2 (Fluent)	Cambridge English: Proficiency
Spanish	Conversational	
German	Basic	

Knowledge Areas

Hard Skills	Pattern writing, Prompt engineering, LaTeX, HTML, CSS, Git
Soft Skills	Teamwork, Communication, Time management, Mentoring, Leadership, Agile methods, Project management

Volunteering and Event Organising

- 2024 **Student Volunteer**, *31st Conference on Pattern Languages of Programs, People and Practices (PLoP 2024)*, Stevenson, WA, USA
- 2023 **Student Volunteer**, *30th Conference on Pattern Languages of Programs (PLoP 2023)*, Monticello, IL, USA
- 2022 **Student Volunteers Co-Chair**, *6th International Conference on the Art, Science, and Engineering of Programming (<Programming> 2022)*, Porto, Portugal
- 2021 **Virtualisation Co-Chair & Proceedings Co-Editor**, *28th Conference on Pattern Languages of Programs (PLoP 2021)*, Online event
- 2019–2020 **Marketing Coordinator**, *BEST Porto*, Porto, Portugal
I coordinated one of the local organisation's departments, provided support for event core team members, managed the organisation's image, including its social media pages and campaigns, and assisted with training organisation members' hard skills regarding this area.
- 2018–2020 **Member**, *BEST Porto*, Porto, Portugal
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. Over those two and a half years, I had the chance to greatly develop my soft skills, broaden my horizons, and contribute to events happening in my university.
- 2018–2019 **Core Team Secretary for BEST Course**, *BEST Porto*, Porto, Portugal
BEST Courses are events where the association hosts international participants for an immersive learning experience that lasts for over a year. For the 2019 course, I managed the timeline for the ten months we spent preparing the course, maintained written records of team activities, and managed the organisation's human resources during the event. In the end, the event was awarded with a quality award by the international branch of BEST.
- 2018 **Marketing Responsible for SciTeCh'18**, *BEST Porto*, Porto, Portugal
I managed the image and promotion of a student competition event, overhauled its visual identity, and managed several supporting smaller teams.

Publications and Works

- 2025 **Patterns for Teaching Agile with Student Projects – Team and Project Setup**, authored by Daniel Pinho, Petr Pícha, Filipe Correia, and Přemek Brada, in *EuroPLoP '25: Proceedings of the 30th European Conference on Pattern Languages of Programs, People, and Practices* (to be published; arXiv preprint linked), DOI: 10.48550/arXiv.2510.03005
- 2024 **Validating Pattern Languages: A systematic literature review**, authored by Francisca Almeida, Daniel Pinho, and Ademar Aguiar, in *EuroPLoP '24: Proceedings of the 29th European Conference on Pattern Languages of Programs, People, and Practices*, DOI: 10.1145/3698322.3698326
- 2024 **Cognitive Patterns for Developer Experience**, authored by Daniel Pinho, Ademar Aguiar, and Vasco Amaral, in *EuroPLoP '24: Proceedings of the 29th European Conference on Pattern Languages of Programs, People, and Practices*, DOI: 10.1145/3698322.3698345
- 2024 **Affective and Conative Patterns for Developer Experience**, authored by Daniel Pinho, Ademar Aguiar, and Vasco Amaral, in *PLoP '24: Proceedings of the 31st Conference on Pattern Languages of Programs, People, and Practices*
- 2023 **Patterns for Low-Code Developer Experience**, authored by Daniel Pinho, Ademar Aguiar, and Vasco Amaral, in *PLoP '23: Proceedings of the 30th Conference on Pattern Languages of Programs*, URL: <https://dl.acm.org/doi/10.5555/3721041.3721060>
- 2023 **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*, DOI: 10.1016/j.cola.2022.101185
- 2021 **Mining Good Practices of Low - Code Software Development from Model-Driven Approaches**, authored by Daniel Pinho, Ademar Aguiar, and Vasco Amaral, in *PLoP '21: Proceedings of the 28th Conference on Pattern Languages of Programs*, URL: <https://dl.acm.org/doi/10.5555/3712039.3712048>
- 2020 **The AgilECo Pattern Language: Physical Environment**, authored by Daniel Pinho and Ademar Aguiar, in *EuroPLoP '20: Proceedings of the European Conference on Pattern Languages of Programs 2020*, DOI: 10.1145/3424771.3424790
- 2020 **Effective Communication in Agile Teams: A Pattern Language**, authored by Daniel Pinho, MSc Dissertation, URL: <https://hdl.handle.net/10216/128599>

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