Afonso Manuel Barral Caniço
Software Engineer, PhD Candidate

✉ afonso.manuel.canico@gmail.com   in linkedin.com/in/afonso-canico

○ github.com/ambco-iscte   iD 0009-0009-9334-717X

🎓 EDUCATION

Doctoral Programme (PhD) in Information Science and Technology,　　09/2024 – present
Iscte - University Institute of Lisbon ⬈　　Lisbon, Portugal
- Research work on Program Comprehension in Programming Education.

Master's of Science (MSc) in Computer Science and Engineering,　　09/2022 – 07/2024
Iscte - University Institute of Lisbon ⬈　　Lisbon, Portugal
- Research work on White-box Assessment for Programming Education ⬈ .
- Grade: 18 / 20.
- Awards: ISTA Top Talent - Academic Excellence Award (2022/23 and 2023/24.)

Bachelor's of Science (BSc) in Computer Science and Engineering,　　09/2019 – 06/2022
Iscte - University Institute of Lisbon ⬈　　Lisbon, Portugal
- Grade: 18 / 20.
- Awards: ISTA Top Talent - Academic Excellence Award (2019/20, 2020/21, and 2021/22.)

💼 WORK EXPERIENCE

Invited Teaching Assistant, Iscte - University Institute of Lisbon ⬈　　09/2022 – 01/2025
Instructed bachelor's students in the courses of Theory of Computation and Algorithms & Data　　Lisbon, Portugal
Structures. Developed a new automated assessment tool for the grading of students'
programming assignments in the latter course.

Professional Trainer, Iscte - University Institute of Lisbon ⬈　　11/2023
Instructed trainees during part of "UpSkill - Digital Skills and Jobs" ⬈ , a professional　　Lisbon, Portugal
qualification and employment programme by IEFP ⬈ in partnership with Iscte.

📖 PUBLICATIONS

A DSL for Dynamic White-Box Evaluation of Java Assignments ⬈　　28/06/2024
Authors: Afonso B. Caniço and André L. Santos.
Venue: 5th International Computer Programming Education Conference. Lisbon, Portugal.
Summary: This paper describes the implementation of a Domain Specific Language (DSL) for
introductory programming evaluation. We test the DSL against a set of real student assignment
submissions to determine if our approach could offer additional insight for evaluation. I
presented this paper at ICPEC 2024. *(Recognised with the Best Paper Award.)*

Witter: A Library for White-Box Testing of Introductory Programming Algorithms ⬈　　19/10/2023
Authors: Afonso B. Caniço and André L. Santos.
Venue: ACM SIGPLAN International Symposium on SPLASH-E, 2023. Lisbon, Portugal.
Summary: This paper describes the need for, development, and demonstration of the practical
feasibility of a white-box software testing and feedback generation library for introductory
programming assignments. I presented this paper at SPLASH-E 2023.

⟩_ SKILLS

Object-Oriented and Functional Programming (Java, Kotlin, Python, C#), **Software Testing** (Beta Testing, Test-Driven
Development, Software Evaluation), **Development Environments** (IntelliJ IDEA, Visual Studio IDE, Visual Studio Code,
PyCharm), **Document Preparation** (LaTeX, Overleaf)