

# Afonso Manuel Barral Caniço

## Software Engineer, Teaching Assistant

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 [github.com/ambco-iscte](https://github.com/ambco-iscte)  0009-0009-9334-717X



### Education

#### **Master's of Science (MSc) in Computer Engineering,**

Iscte - University Institute of Lisbon 

2022 – 2024

Lisbon, Portugal

- Awards: ISTA Top Talent - Academic Merit and Excellence Award (2022)

#### **Bachelor's of Science (BSc) in Computer Science and Engineering,**

Iscte - University Institute of Lisbon 

2019 – 2022

Lisbon, Portugal

- Grade: 18 / 20
- Awards: ISTA Top Talent - Academic Merit and Excellence Award (2019, 2020, and 2021)

### Professional Experience

#### **Invited Teaching Assistant,** Iscte - University Institute of Lisbon

09/2022 – present

Instructed bachelor's students in the courses of Theory of Computation and Algorithms & Data Structures. Developed a new practical assessment process and the required tools for the grading of students' programming assignments in the latter course.

Lisbon, Portugal

#### **Professional Trainer,** Instituto de Emprego e Formação Profissional (IEFP)

11/2023

Instructed trainees during part of "UpSkill - Digital Skills and Jobs", a professional qualification and employment programme by IEPF in partnership with Iscte-IUL.

Lisbon, Portugal

### Publications

#### **A Domain Specific Language 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#, Scala), **Software Testing** (Beta Testing, Test-Driven Development, Software Evaluation), **Development Environments** (IntelliJ IDEA, Visual Studio IDE, Visual Studio Code, Pycharm), **Document Preparation** (LaTeX, Overleaf)

### Certificates

**Introduction to Complex Analysis,** Wesleyan University, through Coursera 

07/2020 – 09/2020