

# MARGARIDA FERREIRA

October 2021



## EDUCATION

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### PhD. Computer Science

2021 – now

*Carnegie Mellon University & Instituto Superior Técnico, University of Lisbon*

Dual Degree PhD fellowship by CMU Portugal. Advised by Professor Inês Lynce and Professor Ruben Martins.

### MSc. Computer Science and Engineering

2018 – 2020

*Instituto Superior Técnico, University of Lisbon*

**GPA:** 17.3/20 (87%). **Specializations:** Artificial Intelligence, Algorithms and Programming. Maximum grade (20/20) on Algorithms for Computational Logic. **Master Thesis:** *FOREST: An Interactive Multi-tree Synthesizer for Regular Expressions*, advised by Professor Inês Lynce and Dr. Miguel Neves.

### MSc. Informatics, Erasmus+ Exchange Year

2018 – 2019

*Technical University of Munich*

**GPA:** 2.29 (79%). Coursework in Artificial Intelligence, Natural Language Processing, Algorithms, Game Theory, Robotics, and Parallel Programming.

### BSc. Computer Science and Engineering

2015 – 2018

*Instituto Superior Técnico, University of Lisbon*

**GPA:** 18.2/20.0 (91%). Maximum grade (20/20) on Discrete Mathematics, Object-oriented Programming and Artificial Intelligence.

## PUBLICATIONS

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**Counterfeiting Congestion Control Algorithms.** M. Ferreira, A. Narayan, I. Lynce, R. Martins, J. Sherry. HotNets 2021.

**FOREST: An Interactive Multi-tree Synthesizer for Regular Expressions.** M. Ferreira, M. Terra-Neves, M. Ventura, I. Lynce, and R. Martins. TACAS 2021.

## EXPERIENCE

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### Teaching Assistant

2020 – 2021

*Instituto Superior Técnico, University of Lisbon*

- Fall 20/21: Artificial Intelligence, BSc. Computer Science and Engineering.
- Spring 20/21: Introduction to Algorithms and Data Structures, BSc. Computer Science and Engineering.

### Early Stage Researcher

2020 – now

*INESC-ID*

Research Group: Automated Reasoning and Software Reliability (ARSR). Project: Automated Programming to Revolutionize App Development (GOLEM).

### Research Internship

2019 – 2020

*OutSystems*

Department of Engineering, division of Artificial Intelligence. Working on Master Thesis topic, under the supervision of Dr. Miguel Neves and Miguel Ventura.

### Research Scholarship

2017 – 2018

*Calouste Gulbenkian Foundation, New Talents in Artificial Intelligence Grant*

Project: *Satisfying Cooperative Path-finding*, developed under the guidance of Professor Inês Lynce. I studied and evaluated SAT-based methods to find an optimal solution for Cooperative Path-Finding.

## SCHOLARSHIPS

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### Dual Degree PhD Scholarship

2021 – 2026

*CMU Portugal Program*

### GOLEM Scholarship

2020 – 2021

*INESC-ID, CMU Portugal Program*

### Visiting Students Program (suspended due to COVID-19)

2020

*CMU Portugal Program*

### Erasmus+ Scholarship at Technical University of Munich

2018 – 2019

*Erasmus Program*

### New Talents in Artificial Intelligence Scholarship

2017 – 2018

*Calouste Gulbenkian Foundation*

## HONORS

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**Academic Excellence Certificates in all 3 years of BSc.  
and last year of MSc. Degree.**

2016–2018, 2020

*Instituto Superior Técnico, University of Lisbon*

## OTHER ACTIVITIES

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**Mathematics Winter School**

Feb. 2021

*Instituto Superior Técnico*

**Autumn school on Combinatorial Optimization, Constraint  
Programming and Machine Learning**

Nov. 2020

*Association for Constraint Programming (ACP), French National Centre for Scientific Research (CNRS)*

**Teaching STEM Students Workshop**

Oct. 2020

*Academic Development Office, Instituto Superior Técnico*

**Mathematics Winter School**

Feb. 2020

*Instituto Superior Técnico*

**Emerging Trends in Computer Science: Pre-doctoral  
Research School**

Aug. 2018

*Cornell University, Maryland University, Max Planck Institute for Software Systems*

**Advanced School on Data Science for Big Data**

Jul. 2018

*Portuguese Association for Artificial Intelligence*

**Search Inside Yourself Formation**

Mar. 2018

*Calouste Gulbenkian Foundation*

## LANGUAGES

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Portuguese: ●●●●●●●

English: ●●●●●●●

German: ●●●●●●●

French: ●●●●●●●

Spanish: ●●●●●●●

Japanese: ●●●●●●●

Exams: *TOEFL iBT*: 118/120, Oct. 2020. *IELTS*: 8.5/9.0, Feb. 2018.