MARGARIDA FERREIRA

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⌂ https://marghrid.github.io

EDUCATION

PhD. Computer Science
2021 – present

Carnegie Mellon University and Instituto Superior Técnico, University of Lisbon

Advised by Professor Inês Lynce and Professor Ruben Martins. Dual Degree PhD fellowship by CMU Portugal. Currently working on using program synthesis to reverse engineer congestion control algorithms.

MSc. Computer Science and Engineering
2018 – 2020

Instituto Superior Técnico, University of Lisbon

GPA: 17.3/20 (87%). **Specializations**: Artificial Intelligence, Algorithms and Programming. **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

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%).

PUBLICATIONS

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

Teaching Assistant
2020 – 2021

Instituto Superior Técnico, University of Lisbon

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

Early Stage Researcher
INESC-ID

Research Group: Automated Reasoning and Software Reliability (ARSR). Project: Automated Programming to Revolutionize App Development (GOLEM). Working on synthesis of regular expressions from examples, and later on using program synthesis to reverse engineer congestion control algorithms.

Research Internship
OutSystems
2019 – 2020

Department of Engineering, division of Artificial Intelligence. Working on synthesis of regular expressions from examples, under the supervision of Dr. Miguel Neves and Miguel Ventura.

Research Scholarship
Calouste Gulbenkian Foundation, New Talents in Artificial Intelligence Grant
2017 – 2018

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

Dual Degree PhD Fellowship
CMU Portugal Program
2021 – 2026

GOLEM Research Scholarship
INESC-ID, CMU Portugal Program
2020 – 2021

Visiting Students Scholarship (suspended due to COVID-19)
CMU Portugal Program
2020

Erasmus+ Scholarship at Technical University of Munich
Erasmus Program
2018 – 2019

New Talents in Artificial Intelligence Scholarship
Calouste Gulbenkian Foundation
2017 – 2018

HONORS

Excellent Teacher Award
Instituto Superior Técnico, University of Lisbon
2020 – 2021

Academic Excellence Certificates in all 3 years of BSc. and last year of MSc. Degree.
Instituto Superior Técnico, University of Lisbon
2016 – 2018, 2020

LANGUAGES

Portuguese: ● ● ● ● ● ●   English: ● ● ● ● ● ◐   German: ● ● ○ ○ ○ ○

French: ● ● ○ ○ ○ ○   Spanish: ● ● ○ ○ ○ ○   Japanese: ◐ ○ ○ ○ ○ ○

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