

MARGARIDA DE ALMEIDA CRUZ FERREIRA

Curriculum Vitae

January 2020



PERSONAL DETAILS

<i>Birth</i>	Lisbon, November 1 st , 1996
<i>Nationality</i>	Portuguese
<i>Phone</i>	(+351) 966 650 596
<i>E-Mail</i>	mac96f@gmail.com
<i>Github</i>	https://github.com/Marghrid

EDUCATION

MSc. Information Systems and Computer Engineering

2018 – now

Instituto Superior Técnico, University of Lisbon

Lisbon, Portugal

Specialisation in Intelligent Systems, Algorithms and Programming.

Master Thesis: *Program Synthesis for User Input Validation*, under advisorship of Professor Inês Lynce and Dr. Miguel Neves. Expected to finish by September 2020.

Erasmus+ Exchange Year

2018 – 2019

Technische Universität München

Munich, Germany

2 semesters in MSc. Informatics. Courses in Artificial Intelligence, Natural Language Processing, Algorithms, Game Theory, Robotics, and Parallel Programming.

GPA: 2.3, 79% (Good, performance well above average)

BSc. Information Systems and Computer Engineering

2015 – 2018

Instituto Superior Técnico, University of Lisbon

Lisbon, Portugal

GPA: 18.2/20.0 (91%), top 2% of class.

Maximum grade (20/20) on Discrete Mathematics, Object Oriented Programming and Artificial Intelligence. Academic Excellence Diplomas for all three years.

Secondary Education

2011 – 2014

Agrupamento de Escolas de Santo André

Barreiro, Portugal

Scientific-Humanistic Degree in Sciences and Technologies.

Final grade: 18.2/20.0 (91%).

School's Best Graduating Grade of 2014 Award and Excellence Diploma for all three years.

WORK EXPERIENCE

Research Internship

2019 – now

OutSystems

Lisbon, Portugal

Department of Engineering, division of Artificial Intelligence. Working on Master Thesis topic: Program Synthesis for User Input Validation, under the supervision of Dr. Miguel Neves and Miguel Ventura.

PROJECTS

Program Synthesis for User Input Validation

2019 – now

Master Thesis, developed with OutSystems and INESC-ID

The goal of this project is to develop a validation synthesizer: upon receiving a set of valid and invalid example values for a form's input fields, the synthesizer automatically generates a validation, that accepts all valid examples rejects all invalid ones. Advisors: Professor Inês Lynce and Dr. Miguel Neves.

Satisfying Cooperative Path-finding

2017 – 2018

New Talents in Artificial Intelligence Grant, with Calouste Gulbenkian Foundation

10 month long project, developed under the guidance of Professor Inês Lynce. I studied and evaluated several SAT-based methods optimal solutions for the problem of Cooperative Path-Finding.

OTHER ACTIVITIES

Cornell, Maryland, Max Planck Pre-doctoral Research School

Aug 2018

Emerging Trends in Computer Science

Saarbrücken, Germany

Software-defined networking, practical formal methods, computational economics and machine learning, systems and network algorithmics, security and privacy, and natural language processing.

Advanced School on Data Science for Big Data

Jul 2018

Portuguese Association for Artificial Intelligence

Porto, Portugal

Data Science, Bias in the Web, Meta Learning, Distributed Learning, Geographic Mining, Multi-dimensional Bayesian network classifiers, Recommender Systems and Reinforcement Learning.

Search Inside Yourself Formation

Mar 2018

Calouste Gulbenkian Foundation

Lisbon, Portugal

The program, created at Google, follows Daniel Goleman's Emotional Intelligence model, covering the topics of Emotional Intelligence, Self-Awareness, Self-management, Empathy, Leadership, Communication, Motivation and Performance.

MatNOVA Mathematics Summer School

Sep 2014

Faculty of Sciences and Technology, NOVA University of Lisbon

Caparica, Portugal

Seminars on the main methods and algorithms of cryptography and the importance of prime numbers in modern ciphering processes.

MatNOVA Mathematics Summer School

Sep 2013

Faculty of Sciences and Technology, NOVA University of Lisbon

Caparica, Portugal

Seminars on the usage of matrices for solving everyday problems, such as computer graphics, economic models, electrical circuits, and strategy games.

LANGUAGES

Portuguese mother tongue

English proficient. IELTS band score 8.5/9.0 (C2), March 2018

German elementary (A2)

French elementary

Spanish elementary