Guilherme Rito

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Name: Guilherme Miguel Teixeira Rito

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Born: November 21, 1993 — Almada, Portugal

Nationality: Portuguese

Education

Computational Complexity course for graduate students of Mathematics, offered by the Mathematics Department of Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Monte da Caparica, Portugal.

MSc in Computer Science and Engineering, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Monte da Caparica, Portugal.

- Average score: 18/20, A in the ECTS grading system.
- Advisor: Professor Hervé Paulino.
- Thesis: Scheduling Computations.

In my thesis, we studied Work Stealing algorithms for multithreaded computations and their limitations. Specifically, we analyzed the efficiency of Work Stealing's load balancing strategy, identified some of its limitations, and proposed a new algorithm that provably overcomes the identified limitations. In addition, we developed a variant of the Work Stealing algorithm that avoids most synchronization overheads, and obtained tight upper bounds on the expected synchronization overheads incurred by the algorithm.

- Best student among all the MSc students of Computer Science and Engineering who completed the degree in 2015/2016.
- BSc in Computer Science and Engineering, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Monte da Caparica, Portugal.
 - Average score: 18/20, A in the ECTS grading system.
 - Best student among all the BSc students of Computer Science and Engineering who completed the degree in 2013/2014.

2006–2011 High School — Escola Secundária Emídio Navarro, Almada, Portugal.

Honors and Awards

- Awarded a prize for being the student with the highest score who concluded the Computer Science and Engineering Integrated Master's degree in 2015/2016.
- Student of Merit of Escola Secundária Emídio Navarro, 2010/2011.

Experience

ACADEMIC EXPERIENCE

- Twelve-month research scholarship for developing a provably efficient algorithm for scheduling idempotent multithreaded computations that is resilient to processor faults. Supervised by Professor Hervé Paulino and supported by NOVA-Lincs, project UID/CEC/04516/2013.
 Participation in a research internship offered by Carnegie Mellon | Portugal program for undergraduate students, at the School of Computer Science of Carnegie Mellon University, Pittsburgh, Pennsylvania, United States of America.
 - The internship's duration was 12 weeks, starting on September 14th and ending on December 9th, 2015. Professor Umut Acar, from the School of Computer Science of Carnegie Mellon University, supervised my research during the internship.
- Participation in UT Austin | Portugal Summer School, at Instituto Superior Técnico, Universidade de Lisboa, Lisbon, Portugal.

TEACHING EXPERIENCE

- Teaching Assistant for two times Programming Languages and Environments (Spring course, for sophomores), at Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Monte da Caparica, Portugal.
- Participation as *tutor* in Ciência Viva initiative, held at Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Monte da Caparica, Portugal.
 - During a week-long internship, high school students were taught the very basics of computer programming, and, in the end of the internship they had already developed a working computer game (Pacman).

Initiatives and Volunteering

- Founder and head of the NOVAStudentTalks initiative, whose goal is to present new technologies to students of Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa. I decided to create NOVAStudentTalks after being at CMU, where students have countless interesting talks to attend, hackathons to participate, etc. NOVAStudentTalks is a non-profit organization composed solely by volunteers that organizes monthly events; to date, we have already hosted 13 talks/workshops, and are working to extend the scope or our events to areas other than Computer Science.
- Participation as *volunteer* in *Expo FCT*, at Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Monte da Caparica, Portugal.

Contest Participations

Ranked first in a high school programming contest organized by Universidade de Aveiro, and hosted by Escola Secundária Mem Martins, Lisbon, Portugal.

Technical Skills

Programming Languages: C, Java, OCaml, Python Other Languages: SQL Text Editors: GNU Emacs

Hobbies

Judo — 1^{st} kyu (Brown belt).