GUILHERME GRIJÓ PIRES

MSc Student of Electrical and Computer Engineering

Wannabe World Changer - hopefully through ML/Data Science/AI/SW Development.
Citizen of the world, born and living in Lisbon, Portugal.

Main skills:

- I've worked with Python, C, C++, Go, Java, Javascript, CSS+HTML, VHDL, ROS, OpenMP, MPI.
- Theoretical background in ML, AI, Computer Architectures, Algorithms, Optimization, Parallel and Distributed Computing, Control Theory.
- I speak Portuguese (native), English and Spanish (fluent) and German (intermediate).
- Easygoing, team worker, good communicator.

Corporate Experience

2017 (2 months) - Winternship at Snowplow | *Remote*

Scala programming for the Google Cloud Platform - GCP Pub/Sub, Dataflow and Big Table, mostly. (**Scala**)

Contributions to Snowplow's main solution: Snowplow, an event data pipeline (**Scala**)

2013 (3 months) - Internship at Quidgest | *Lisbon, Portugal*

Code review and refactoring. R&D. (**C++ and C#**)

Projects

Dynamic Bayesian Network Constructor | *Java*

- Inferring cause-effect relations between random variables, given samples of these variables over time
- Done in the context of an OOP course

SATPLAN system | *Python*

- Encoding of PDDL problems to SAT, solving them as SAT and decoding the solution
- Done in the context of an AI course

Prototype for a Distributed e-mail System | *Go*

- Secure and privacy-concerned distributed e-mail system, based on a Kademlia DHT
- Done in the context of a Cryptography and InfoSec course

Skeleton for a Distributed Hashtable | *C*

- Implementation of a distributed algorithm to manage a P2P ring (over TCP)
- Done in the context of a Computer Networks course

Skeleton for a Chat Server | *C*

- Implementation of a fault tolerant Chat Server

- Learning about concurrence problems and race conditions, but also Software Systems Design and Planning
- Done in the context of a Systems Programming course

Parallelization of a MAXSAT Solver | *C*

- Implementation of three versions of a MAXSAT solver: Serial, Parallel (OpenMP) and Distributed (MPI)
- Learning about parallelization and its inherent problems and the correct approaches to them. Learning Scalability
- Done in the context of a Parallel and Distributed Computation course

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Education

2012-2017 - MSc in Electrical and Computer Engineering at Instituto Superior Técnico | *Lisbon, Portugal*

- Top portuguese Engineering University
- Master thesis on Automated Fact-Checking (work in progress)

2015-2016 (Winter Semester) - ERASMUS program at Karlsruher Institut für Technologie | *Karlsruhe, Germany*

Activities and interests

Hobbies

Travelling, playing music, reading.

Sports

I've been practicing Track and Field since I was 10. I also did Gymnastics and Basketball.

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