João Manuel Pereira *March 3, 1995*

joaomacp.github.io · linkedin.com/in/joaomanuelpereira · 95joaopereira@gmail.com

Education

Instituto Superior Técnico
PORTUGAL

MSc in Computer Science, Major in Intelligent Robotics *2018—2020*

Final grade: 17/20
Thesis: "Domestic Robot Grasping using Visual Servoing and Deep Learning"
Installed a robotic arm in a domestic mobile robot. Developed an object grasping mechanism using visual servoing and deep learning for visual feedback. Implemented in ROS.

Universidade Nova de Lisboa
PORTUGAL

BSc in Computer Science *2013—2016*

Experience

Ocado Technology
UNITED KINGDOM

Software engineer, Simulation, Advanced Technology *2021—present*

- Developed Unity-based simulation of robotic picking, predominantly in C#
- Created and improved simulation tools for robotics, mainly in Python
- Set and prioritized tasks based on internal client needs

Institute for Systems and Robotics - IST
PORTUGAL

Research assistant *2019—2020*

Under a research grant, implemented robotic benchmarks to use in European Robotics League competitions. Additionally, developed software for the european project eurobench, a benchmarking framework for bipedal robots.

agap2 IT
PORTUGAL

Software engineering consultant *2016—2018*

- Worked with shipping solutions company Transsmart. Implemented connections to several courier APIs to book and track shipments.
- Developed a macOS application for DPD clients.

Skills

- Proficient in written and spoken English
- Good teamwork and technical communication skills
- Solid foundations in computer architecture, algorithms, data structures, databases and distributed systems
- Strong software development skills — comfortable with Python, Javascript, Java, C#, C++
- Experience developing user-facing APIs that are intuitive and well-documented
- Capable of full-stack software development including backend, web, native and mobile app development — with professional experience and several personal projects

Other Projects

Smart Cities Robotics Challenge
<div align="right">Milton Keynes, UK</div>

European Robotics League — *2019*

Helped to organize, referee, and manage the audience visualization system for the Smart Cities Challenge 2019, a robotics competition at the centre:mk shopping mall in Milton Keynes.

Autonomous driving competition
<div align="right">Portugal</div>

Robotics festival 2019 — *2019*

Developed autonomous car systems, including traffic-sign recognition and obstacle detection and avoidance, to compete in the autonomous driving competition of the Portuguese robotics festival.

MIUP/SWERC 2015
<div align="right">Portugal</div>

College programming contest — *2015*

Took part in MIUP 2015, a national college programming contest held at Universidade do Porto. Our team qualified for and competed in the Southwest Europe regional contest.

FCT NOVA Hackathon
<div align="right">Portugal</div>

Second place in college hackathon — *2015*

Participated in the 2015 edition of the college hackathon and placed second. Our team developed a multiplayer Android game, based on an existing traditional board game.