

João Cartucho

✉ to.cartucho@gmail.com
☎ +351 913 113 753
🐙 github.com/Cartucho
🌐 linkedin.com/in/cartucho

EDUCATION

Instituto Superior Técnico

Lisbon, Portugal — 2013-2018

MSc Aerospace Eng. (GPA: 18/20)

(Focus: Computer Science)

Coursework

Programming (C, 19/20),

Autonomous Systems (Python, 19/20),

Artificial Intelligence (C++, 27/30),

Communications System (C#, 30/30),

Object-Oriented Prog. (Java, 30/30),

Optimized Algorithms (Python, 27/30)

SKILLS

Languages Portuguese (native), English (IELTS: 8/9), Italian

Programming C, C++, Python, Java

Platform Linux

Software Git, OpenCV, ROS, Shell

AWARDS

Certificate of Academic Merit

Best Master's Thesis Video Award

FCT Scholarship - IST/CMU

Chosen for a 3-month long student exchange program in USA.

2nd place at a CMU's Hackathon

Implemented a robotic pancake maker.

REFERENCES

Manuela Veloso

Machine Learning Department

School of Computer Science

Carnegie Mellon University

mmv@cs.cmu.edu

Vincent Rabaud

Google Inc., Senior Software Engineer

OpenCV Foundation, Co-founder

vincent.rabaud@gmail.com

01.28.2019

EXPERIENCE

RoboCup

2018

RoboCup@Home

Montréal, Canada

- Part of the SocRob@Home team, which finished in 4th place, I was responsible for the Computer Vision tasks.
- Became member of the RoboCup Organizing Committee.

Carnegie Mellon University

2017

Machine Learning, Student Internship

Pittsburgh, PA, USA

- Introduced a learning algorithm that enhances a robot's object recognition capabilities by asking humans for help. Advised by Professor Manuela Veloso.

Google Summer of Code

2016 and 2017 (twice)

Open source, Mentored by Vincent Rabaud

Software development for OpenCV (Computer Vision library):

- Tools for multi-language tutorials (web development);
- Python and Java code tests;
- Function/method prototypes for the Python bindings;
- 20 updated tutorials (in C++, Java and Python).

PROJECTS

mAP Individual Project, March 2018

Open source tool to evaluate the performance of an object detector.

Currently has 432 stars and 147 forks on GitHub.

OpenLabeling Individual Project, February 2018

Open source image labeling tool.

Currently has 312 stars and 82 forks on GitHub.

PUBLICATIONS

Robust Object Recognition Through Symbiotic Deep Learning In Mobile Robots

J. Cartucho, R. Ventura, M. Veloso. IROS 2018.

(Nominated for Best RoboCup Paper)

Towards a Robust Interactive and Learning Social Robot

M. Jong, K. Zhang, T. Rhodes, A. Roth, R. Schmucker, C. Zhou, S.

Ferreira, J. Cartucho, M. Veloso. AAMAS 2018.

VOLUNTEERING

StackOverflow Over 400,000 views on my posted answers.

Youth Exchanges in Italy, Turkey, Greece, Romania, Finland.