

## Undergraduate Internship Program Report – Fall 2017

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From September to December 2017 I had the opportunity to work at Carnegie Mellon University, in Pittsburgh. This report gives a summary of my developed work and some experiences that I lived there.

I was sponsored by Professor Rodrigo Ventura and hosted by Professor Manuela Veloso. Professor Manuela joined me to the CORAL group and gave me a space to work in her laboratory where I met her students and projects.

The proposed work was the development of an architecture with a mobile application capable of controlling different types of robots. The mobile app was developed for Android devices and adapts its menu to the robot that the user intends to command. The user can give commands to the robot by speech, text messages or simply by clicking on predefined buttons. The functions available in the mobile application are the tasks that Cobot and Pepper robots can perform at the moment.

During my time in CMU, I had the opportunity to write for two scientific papers. One focused on Pepper robot, where a section about the mobile application was inserted. And the other one about my architecture.

In addition to the work, I participated in several lectures and seminars provided by CMU about machine learning and systems programming.

One of the most interesting things about CMU is the opportunity to meet people from many places around the world and their cultures. On campus, the people are amazing and are working on exciting projects.

I would like to acknowledge Professor Manuela for all the support. And, I would also like to thank CMU Portugal and FCT for allowing me to participate in this program.