

LUCAS COELHO FIGUEIREDO

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EDUCATION

Federal University of Minas Gerais	08/2015 - 06/2018
Masters in Electrical Engineering	Belo Horizonte, Brazil
Thesis: Human-robot swarm interaction on multi-robot coverage control with Virtual Reality	
Rockstart Accelerator	08/2016 - 08/2016
Startup Acceleration Program <i>Rockstart Smart Energy</i>	Amsterdam, The Netherlands
Federal University of Minas Gerais	03/2010 - 07/2015
Bachelor in Control and Automation Engineering	Belo Horizonte, Brazil
The University of Texas at Austin	08/2013 - 05/2014
Exchange Program in Electrical Engineering and Computer Science	Austin, USA
Federal Center of Technological Education	05/2007 - 12/2009
Technical Program in Electronics	Belo Horizonte, Brazil

EXPERIENCES

Hexagon Mining	11/2017 - Today
Software Specialist & Scrum Master	Belo Horizonte, Brazil
<ul style="list-style-type: none">· Main Python developer of the team· Responsible for the Scrum process, meetings, managing conflicts between team members· Designed and participated on the development of solutions for autonomous trucks on mining industry, including a high precision, GPS-based parking assist and a mission manager for autonomous trucks· Developed peer-to-peer communication using DDS solutions	
Newatt Energy Systems	09/2015 - 08/2017
Co-Founder and CTO	Belo Horizonte, Brazil and Amsterdam, The Netherlands
<ul style="list-style-type: none">· Responsible for the technical decisions and relationship with partners and investors· Coordinated the application for Google Cloud Platform for Startups Program and received U\$ 100,000 in credits from Google· Managed the team for the implementation of the cloud structure in Node.js and Python· Implementation of embedded software in C++ for low power microcontrollers	
Freelance Android Developer	08/2016 - Present
Development Leader	Belo Horizonte, Brazil
<ul style="list-style-type: none">· Managed the whole project, since client prospection, requirements proposal, value negotiation, development and delivery· Worked in combination with a designer to deliver functional and good looking apps	
DTI Digital Technologies	10/2014 - 08/2015
IT Intern	Belo Horizonte, Brazil
<ul style="list-style-type: none">· Developed projects for supervisory systems, smartphone apps and administration systems in C#, Java and Android, following Agile methodology· Worked in internal tools for the company in direct contact with their top managerial staff	
Multi-robot Systems Laboratory - Boston University	05/2014 - 08/2014
Summer Research Intern	Boston, USA
<ul style="list-style-type: none">· Created algorithms for multi-robot systems applied in area coverage and autonomous exploration	

- Developed embedded software for *mbed* microprocessors in C++
- Published academic results at ICRA 2015 and IJRR 2017

Computation and Robotics Lab - UFMG

10/2010 - 08/2013

Undergraduate Research Assistant and Electronics Technician Intern

Belo Horizonte, Brazil

- Large experience in ROS, working on it since Diamondback version (2011) and becoming reference on ROS for labmates and professors
- Designed and assembled five robots for indoor experiments based on the Open Hardware project Turtlebot
- Software development in Linux environment using C++, ROS and MATLAB

AWARDS AND GRANTS

Rockstart Smart Energy Program

02/2016 - 08/2016

Participant

Amsterdam, The Netherlands

- Selected as the top 10 among more than 500 participating startups.
- Received investment from a Dutch accelerator (Rockstart)
- Participated in pitching competitions and investor meetings

StartupFarm Industry

12/2015

Second Place

Belo Horizonte, Brazil

- Participated in an acceleration program from the biggest startup accelerator in Latin America, obtaining the second place at their Demo Day

Brazilian Science Mobility Program

08/2013 - 08/2014

Awardee

Austin, USA

- Selected for the grant, that covered a year of studies at The University of Texas at Austin, including tuitions, housing, meals, travel expenses and internship

PUBLICATIONS

International Journal of Robotics Research (IJRR)

02/2017

- A. Pierson, L. C. Figueiredo, L. C. A. Pimenta, e M. Schwager. "Adapting to Sensing and Actuation Variations in Multi-Robot Coverage"
- Experimental results at: <https://www.youtube.com/watch?v=qyYt3frZ7aw>
- Considered the most influential journal in robotics research

IEEE International Conference on Robotics and Automation (ICRA)

05/2015

- A. Pierson, L. C. Figueiredo, L. C. A. Pimenta, e M. Schwager. "Adapting to Performance Variations in Multi-Robot Coverage"
- Considered the best conference in robotics research

SKILLS

Programming

C, C++, Python, Robot Operating System - ROS C#, Java, Node.js
Android, Google Cloud Platform, Amazon Web Services, MATLAB

Databases

RTI DDS, OpenSplice DDS
MongoDB, PostgreSQL, InfluxDB

Electronics

Arduino, Eagle, Altium

Office

Word, PowerPoint, Excel, Visio

Managerial

Scrum, Agile, Lean Startup

Other

AutoCAD, 3ds Max, Ubuntu, LaTeX, JUnit, UML

English

Fluent

Portuguese

Native