

# Marvin Chancán

2nd Year PhD Student | [mchancan.github.io](https://github.com/mchancan)

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## EDUCATION/AWARDS

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### Ph.D. in Robotics and Autonomous Systems

Apr 2018 – Present

*Queensland University of Technology*

Brisbane, Australia

- Top ¥ 300,000 (about USD 40,000) Innovation Grant Prize at the 2019 International Collegiate Competition for Brain-inspired Computing (ICCBC 2019) for the research “NeuroSLAM: a brain-inspired SLAM system for 3D environments.”
- Republic President’s Scholarship to pursue a PhD degree, by the Peruvian Ministry of Education.

### MBA in Project Management

Jun 2013 – Dec 2014

*European Postgraduate Institute, San Pablo CEU University*

Madrid, Spain

- Methodologies and tools by the Project Management Institute.
- Scholarship to pursue an MBA by the Peruvian Institute for Educational Development.

### M.S. in Mechatronics Systems

Aug 2010 – Aug 2012

*Pontifical Catholic University of Rio de Janeiro*

Rio de Janeiro, Brazil

- Full scholarship to pursue a Master’s degree, by the Brazilian Ministry of Science, Technology, Innovations and Communications (CNPq).

### B.S. in Mechatronics Engineering

Aug 2005 – Dec 2009

*National University of Engineering*

Lima, Peru

- Top 1 of bachelor’s class ( $\sim 17$  students in 2009-II).
- Academic Diploma of Honor, for having the best performance in class.
- Member of the Control Systems and Artificial Intelligence Research Group.
- Top 1% of applicants’ score ( $\sim 2829$  applicants in 2005-II).

## PUBLICATIONS

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### Journals / Conferences

- **M. Chancán**, M. Milford. From Visual Place Recognition to Navigation: Learning Sample-Efficient Control Policies across Diverse Real World Environments. *arXiv preprint arXiv:1910.04335* (2019). Submitted to ICRA 2020.
- **M. Chancán**, L. Hernandez-Nunez, A. Narendra, A.B. Barron, M. Milford. A Compact Neural Architecture for Visual Place Recognition. *arXiv preprint arXiv:1910.06840* (2019). Submitted to RA-L with ICRA 2020 option.
- **M. Chancán**, J. Cuisano. Adaptive control of intake air conditioning systems for engine testing. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 41:231 (2019).
- **M. Chancán**, J. Ríos. Application of neural networks for three-phase induction motor speed control using a digital signal processor. *XVI Mechanical and Electrical Engineering Students’ International Congress (CONEIMERA)*, Cusco, Peru (2009).

### Posters

- F. Yu, **M. Chancán**, J. Shang, Y. Hu, M. Milford. NeuroSLAM: A Brain Inspired SLAM System for 3D Environments. *2019 International Collegiate Competition for Brain-inspired Computing (ICCBC 2019)*, Tsinghua University, Beijing, China (2019).

## ACADEMIC POSITIONS

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### Assistant Professor

Mar 2016 – Mar 2018

*Pontifical Catholic University of Peru*

Lima, Peru

- Taught undergraduate courses with the Department of Mechatronics Engineering during 4 semesters.
- Co-taught “Diploma in Cloud Computing Technologies,” a 144 hours course for academics and researchers from local universities and national research institutions. Contents: Linux Foundations, Advanced Linux Networking, Cloud Computing with OpenStack.

### Guest Lecturer

Feb 2017 – Jun 2017

*National Institute of Research and Training in Telecommunications*

Lima, Peru

- Taught “Introduction to High-Performance Computing,” a 30 hours course on shared and distributed parallel programming using CPU cores and libraries such as OpenMP and MPI.

### Researcher

Aug 2012 – Oct 2012

*Pontifical Catholic University of Rio de Janeiro*

Rio de Janeiro, Brazil

- Research project: Optimization of petroleum production process using Genetic Algorithms.

### Research Student

Aug 2011 – Aug 2012

*Pontifical Catholic University of Rio de Janeiro*

Rio de Janeiro, Brazil

- Master’s thesis: Adaptive control of intake air properties for engine testing using Fuzzy Logic.

### Research Student

Jun 2009 – Dec 2009

*National University of Engineering*

Lima, Peru

- Bachelor’s thesis: Control of a three-phase induction motor using neural networks on a digital signal processor.

## ADVISING

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### B.S. thesis

- K. Chuquirahui. Design of an UAV for autonomous navigation using deep learning algorithms running on NVIDIA Jetson TK1. Pontifical Catholic University of Peru, Lima, Peru (2016).

## INDUSTRY EXPERIENCE

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### Solution Architect | High-Performance Computing

Dec 2016 – Mar 2018

*StorageData S.A.C.*

Lima, Peru

- Conducted technical pre-sale process of complete IT infrastructure for academic research including hardware (CPU, GPU, memory, storage, networks) and HPC software stack.
- Identified business opportunities and developed new customer relationships by making contact and consulting their IT infrastructure.
- Increased the customer’s portfolio with 5 local universities and 2 research institutions in Peru.

### Automation Engineer & Project Coordinator

Jun 2013 – Jun 2015

*Rede Globo Television*

Rio de Janeiro, Brazil

- Responsible of the facilities maintenance and building management system (BMS) operation of TV Globo’s headquarter, including IT infrastructure and studio control rooms for channel programs production.
- Leded technicians to properly install, operate and maintain building automation systems such as fire alarm and detection systems (Honeywell, Xtralis).

## TECHNICAL STRENGTHS

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### Computer Languages

C/C++, C#, Python, MATLAB

### Machine Learning

TensorFlow, PyTorch, CUDA/cuDNN.