Marvin Chancán

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EDUCATION/AWARDS

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, *Summa Cum Laude* ($\sim$ 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

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

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

B.S. thesis

- K. Chuquiraqui. 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

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.
- Leaded technicians to properly install, operate and maintain building automation systems such as fire alarm and detection systems (Honeywell, Xtralis).

TECHNICAL STRENGTHS

Computer Languages	C/C++, C#, Python, MATLAB
Machine Learning	TensorFlow/Keras, PyTorch, CUDA/cuDNN.