

EDUCATION

OSAKA UNIVERSITY

PHD STUDENT IN

ROBOTICS & AUTOMATION

From Oct 2019 | Osaka, Japan

OSAKA UNIVERSITY

MENG IN INTELLIGENT SYSTEMS

Sep 2019 | Osaka, Japan

UNIVERSITY OF LA SABANA

BS IN COMPUTER SCIENCE

Aug 2013 | Bogota, Colombia

LINKS

Github:// [cambel](#)

LinkedIn:// [cristianbehe](#)

ResearchGate:// [Cristian_Beltran](#)

COURSEWORK

GRADUATE

Reinforcement Learning

Robot Manipulation

Intelligent Systems

Machine Learning

LANGUAGES

Spanish: Native

English: Professional proficiency

Japanese: Conversational

SKILLS

PROGRAMMING

Over 5000 lines:

Java • Python • Android

SQL • Matlab • Javascript

ROS • Arduino

Over 1000 lines:

C# • C++ • Shell • CSS

EXPERIENCE

LA CADENA RETAIL SOLUTIONS | SOFTWARE DEVELOPER

Oct 2016 - Mar 2017 | Bogota, Colombia

- Design and development of an administrative web application. Backend based on Java 8 using Spring framework with Spring Boot, Spring Security, Spring Cloud and Spring Rest. Microsoft SQL Server database. Front-end based on JavaScript ES6, React JS, Redux and Material Design. Communication based on Restful Webservices.

NETLOGISTICS | SOFTWARE ENGINEER

Aug 2013 - Mar 2016 | Bogota, Colombia

- Design and implementation of supply chain software, particularly warehouse management systems (WMS RedPrairie / JDA). Multi-language developments: Java, C#, C, Groovy, SQL Server, Oracle SQL and PL SQL.

SF INTERNATIONAL | SOFTWARE ENGINEERING INTERN

May 2013 - Aug 2013 | Bogota, Colombia

- Design, development and implementation of databases based on Oracle SQL and Microsoft SQL Server.
- Software development for IBM applications based on C# and Java.

RESEARCH

ROBOT MANIPULATION LAB | RESEARCHER

Apr 2017 - Present | Osaka, Japan

Working with **Prof Kensuke Harada** and Fujifilm R&D to create motion planning solutions for industrial assembly tasks based on Reinforcement Learning techniques.

CAPSAB LAB | UNDERGRADUATE RESEARCHER

Jul 2012 - Jul 2013 | Chia, Colombia

Worked with **Andrea Santos** and **Prof Claudia Garzon** to develop **SACVAP FUZZY**, an automated fuzzy logic-based system to control variables for the production of microalgae.

AWARDS

- | | |
|-----------|---|
| 2019 | Best oral presentation , The 20th SICE Conference on System Integration, Japan |
| 2019 | Finalist of Best Paper Award in the IEEE/SICE International Symposium on System Integration (SII), Paris, France |
| 2018 | Finalist of International Session Best Paper Award , in The 36th Annual Conference of the Robotics Society of Japan (RSJ), Nagoya, Japan |
| 2017-2022 | Academic scholarship by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) |

PUBLICATIONS

- [1] Cristian Camilo Beltran-Hernandez et al. "Learning Force Control for Contact-rich Manipulation Tasks with Rigid Position-controlled Robots". In: *IEEE Robotics and Automation Letters* 5.4 (2020), pp. 5709-5716.
- [2] Cristian C Beltran-Hernandez et al. "Variable Compliance Control for Robotic Peg-in-Hole Assembly: A Deep Reinforcement Learning Approach". In: *arXiv preprint arXiv:2008.10224* (2020).
- [3] Cristian C Beltran-Hernandez et al. "Learning to Grasp with Primitive Shaped Object Policies". In: *2019 IEEE/SICE International Symposium on System Integration (SII)*. IEEE. 2019, pp. 468-473.
- [4] Mario Arbulu et al. "Industry 4.0, Intelligent Visual Assisted Picking Approach". In: *International Conference on Mining Intelligence and Knowledge Exploration*. Springer. 2018, pp. 205-214.
- [5] Cristian C Beltran-Hernandez, Andrea Santos, and Claudia Garzon. "Control de temperatura en un bioproceso utilizando Lógica Difusa". In: *II Congreso Internacional Ingeniería Mecatrónica y Automatización*. CIIMA. 2013.