

Carolina Silva Plata



INFORMATION

Birthday:
October 5, 1991

Nationality
Bolivian

Residence in Chile
Permanent Visa

Phone:
+56 9 66931048

email:
carolinne5.10@gmail.com

Website
www.carolinnesilva.com

EDUCATION

ENGINEERING

Universidad de Chile - Santiago, Chile

2020 - Present Ph.D. student in Mechanical Engineering,
2019 - 2021 Soft Robotics Research 2019 - 2021

Massachusetts Institute of Technology - Cambridge, United States

2019 Certificate in the MIT Bootcamp Deep Technology
Innovation Program

Universidad Católica del Norte - Antofagasta, Chile

2017 - 2019 Master's in Informatics (with highest distinction)
2018 - 2019 Research and thesis development in the field of Soft
Robotics at the Universidad de Chile, (Santiago,
Chile)

Universidad Católica Boliviana - La Paz, Bolivia

2014 Higher Education Diploma
2009 - 2013 Bachelor's in Mechatronics Engineering

ILLUSTRATION

EDESIGN, Universidad Internacional de Valencia, Spain

2022 - 2023 Master's in Illustration and Animation

Crehana

2020 Digital Illustration Specialization Diploma

PROFESSIONAL EXPERIENCE

Soft Robotics Research - Universidad de O'Higgins

September 2023 - Present

Research Assistant in the Fondecyt research
project "A Sensorization Toolbox for the
Realization of Soft Physical Twins: Applications
to Phantoms of Human Organs"

Lecturer - Universidad de Chile

March 2023 - Present

Course: Mechatronics, Undergraduate program
in Mechanical Engineering.

Design and manufacturing of the nasal cannula for the Open HFNC project - Universidad de Chile

2020

Research and development of an alternative
device to support the rehabilitation of individuals
affected by COVID-19

SKILLS

**Programming
Languages:**
Python
C++

Software
SolidWorks
Autodesk Inventor
Fusion

Graphic Design
Adobe Ecosystem
Final Cut Pro

MEMBERSHIPS IN ORGANIZATIONS

Founding Partner of “NiñasPro” Organization

2018 - Present Mentor in computer science, electronics, and educational robotics for girls in Chile.
- *Current member of the board* -

Teacher and Designer in “Niñas Pro” Organization

2019 - Present Lead teacher in the Arduino Quest at Niñas Pro organization.
Graphic material designer at Niñas Pro.
- *Organizer, instructor and designer* -

Member of the organizing team “Beauchef Robotics Challenge”

2022 - Present University robotics competition organized by the Universidad de Chile.
- *Current member of the organizing team* -

Founding Partner of “Cuac” Corporation

2020 - Present Dedicated to democratizing robotics and educational technology in Chile.
- *Current member of the board* -

Founder of “Connected”

2014 - 2016 Focused on teaching robotics and educational electronics with LEGO MINDSTORMS and Arduino board to children in Bolivia.
- *Founder, Organizer, and Instructor* -

DIGITAL MEDIA AND OUTREACH

Communications Coordinator - FabLab Universidad de Chile

August 2022 - August 2023

Designer of audiovisual material and workshop leader for Arduino.

Creation of graphic and audiovisual material and event management for Beauchef Robotics Challenge (BRC) 2022 and other events.

Illustrator and Graphic Designer

2020 - Present Product illustrator at “La Mapache Azul”.

Technology Outreach at “Adablu” YouTube Channel

2020 - Present Content Creator of infographics and technology outreach videos on a personal YouTube channel.
- *Responsible for end-to-end video production* -

Illustrative Design in “Electrónica Así” and “Informática Así”
2015 - Present Creator of illustrative content in electronics and educational and comical computer science for teaching purposes. Independent initiatives.

EVENT ORGANIZATION

BEAUCHEF ROBOTICS CHALLENGE (BRC)

In-person Format

Member of the organizing team

November 2023 (4th version)

Responsibilities: Team registrations, visual identity graphic design, website design and administration, and user experiences.

November 2022 (3rd version)

Responsibilities: Team registrations, event promotion, visual identity graphic design, website and social media design and administration, audiovisual documentation, and user experiences.

NIÑAS PRO - ARDUINO QUEST

Virtual Format

Current member of the board

July (202, 2021, 2023)

Responsibilities: Lead Instructor, developed educative material, created asynchronous class videos, taught practical classes, designed challenges and projects, reviewed student projects, and organized mentoring sessions on student schedules with mentors.

(Platform: Classroom, Google Meet and Tinkercad)

FabLab U de Chile - ARDUINO DAY

In-person Format

March 2023

Responsibilities: Main organizer, logistic coordination, program and activities coordination, visual identity graphic design, event and post-event supervision.

COMPETITIONS

- 2019 Third place in the VIII Student Competition of Chile-WiC (Women in Computing) with the Scientific Project on Soft Gripper.
- *Student Scientific Research Competition* -
- 2017 Latin America Representative at the Minesweeper competition in Kuala Lumpur, Malaysia.
First place in Minesweeper Continental, Latin America.
- *Lead Circuit and Code Developer* -
- 2012 Participation in the Robotics Olympics. Second place in the LEGO Mindstorms robot soccer category, Bolivia.
- *Lead Mechanical Design Engineer* -

PUBLICATIONS

- 2016 Author and designer of the book “Connect Your Creativity with Arduino” (self-publication)
- 2025 “Model-Based Capacitive Touch Sensing in Soft Robotics: Achieving Robust Tactile Interactions for Artistic Applications”
Carolina Silva Plata, Carlos Rosel, Barnabas Gavin Cangan, Hosam Alagi, Björn Hein, Robert K. Katzschmann, Rubén Fernandez, Yosra Mojtahedi, Stefan Escalda Navarro.
IEEE Robotics and Automation Letters (RA-L), 2025.
DOI: [10.1109/LRA.2025.3539940](https://doi.org/10.1109/LRA.2025.3539940)