

# FRANCISCO CASADO

ENGINEER & EDUCATOR

## CONTACT

✉ hola@franciscocasado.cl

## ABOUT ME

I'm a *team player* and good at sharing knowledge. I describe myself as a *crafty, curious* and *flexible* problem solver.

I love putting technology at peoples service and strive to enable meaningful experiences through it.

*Learning* is one of my passions. I love learning new things and I am profoundly interested in how teams learn.

## MORE INFO

🌐 franciscocasado.cl

🐙 FranciscoCasado

🌐 fcasadoc

## EDUCATION

Electrical Engineer  
*University of Chile, 2018*

## SKILLS

*Languages:*

Native Spanish, Fluent English

*Programming & Software:*

✔ Python, C/C++, JavaScript, NodeJS,  
HTML & CSS, SQL,  
UNIX, Git, sh, TDD, Agile.

✧ Flask, RoR, Django, MongoDB

*Electronics*

✔ Arduino, PIC, Xilinx, TI Launchpad;  
RFID; Altium, Eagle,  
✧ MQTT, ESP32, ROS

*Mechanical Design:*

Fusion 360, Blender

## WORK EXPERIENCE

### Lead Developer & Coordinator

Beauchef Proyecta - University of Chile  
JUL 2019 - PRESENT

- Design and implement projects that enable *remote & hands-on* learning experiences in robotics, automation and industry 4.0, for our students, while staying safe at home during the pandemic.

We deployed 8 *remote-operated* robotics platforms, using *Web and IoT technologies* and sent more than 50 robotics kits by postmail.

*See below: My Little Factory and Sh\*tty Robots*

### Hardware Developer

Papinotas  
DEC 2017 - MAY 2019

- Hardware and software development for an automated and free-flow attendance platforms for public schools. Worked with UHF RFID technologies, Raspberry Pi, Flask framework and company's own web application (Ruby on Rails).

We managed to deploy more than 40 units all over Santiago, with very little maintenance needed.

### Part Time Lecturer

Department of Electrical Engineering - University of Chile  
MAR 2020 - PRESENT

- Teacher of innovation-related courses:  
EL3105 - Seminar on Electrical Engineering & Technology Innovation  
EL5002 & EL5004 - Design Workshops.

## HIGHLIGHTED PROJECTS

- **My Little Factory:** Scaled version of a factory facility, including robotic arms, conveyor belts, webcams and micro-computers for each arm. The aim of the project is to provide a space for learning practical robotics and automation in an inexpensive and friendly way at our Engineering School.  
JAN 2021 - PRESENT
- **Sh\*tty Robots:** Lectures and mechatronics kit, delivered by post mail, for enabling richer learning experiences for 2nd year student, while staying safe at home during the pandemic.  
SPRING 2020 - PRESENT
- **B.AMBÚ:** UChile's Emergency Ventilator (COVID-19).  
WINTER 2020
- **Thesis Project:** An FPGA-based digital multiple beamformer for radio-astronomy and telecommunication applications. Proof of concept of RF frontend phased array (4x4 patch antennas @ 5.8 GHz), integrated with digital signal processing implemented on ROACH-2 (Xilinx Virtex-5), for spacial filtering.

*Developed at Millimeter and Submillimeter-wave Lab, Santiago Chile*

MAR 2017 - DEC 2017