Francisco González Rosabal

Highly motivated Mechatronics Engineer with a proven track record in Robotics, Automation, and AI. Eager to leverage gained knowledge and hands-on experience to drive innovation and contribute to cutting-edge engineering challenges.

Address	Nuremberg, Germany	**E-Mail**	francisco@gonro.net
Date of Birth	21/02/1998, San José, Costa Rica	**LinkedIn**	linkedin.com/in/francisco-gonzalez-r

Education

2023 – Today Master of Science in Robotic Systems Engineering, RWTH, Aachen, Germany. Expected graduation 2026.

2017 – 2023 Bachelor of Science in Mechatronics Engineering in Instituto Tecnológico de Costa Rica, Cartago, Costa Rica, honor degree diploma.

2011 – 2015 School completion at Saint Francis College in San José, Costa Rica, honor degree diploma.

Languages

Spanish	Native
English	Proficient (C2.2)
German	Advanced (C1.2)

Skills

Programming: Python, C++, G-Code, Verilog, Arduino, Assembly Language, Artificial Intelligence, ROS, PLC

Software: AutoCAD, Inventor, Solidworks, Matlab, Simulink, PLECS, Office, TIA, HMI, NX

Experience

20225-Present **Master Thesis in Factory Automation department of Siemens, Nuremberg, Germany.**

Project consists in the integration of Vision-Language-Action Models for Problem Mitigation in PLC-Controlled Industrial Processes.

2025 **Internship in the Factory Automation department of Siemens, Nuremberg, Germany.**

Contributed to the advanced development of ROSie, a tool to connect ROS and PLCs.
Support in the testing of AI tools known as industrial copilots.
Automated daily operational processes by implementing AI and open-source solutions.

2024 - 2025 **Student assistant in the Institute for Mechanism Theory, Machine Dynamics and Robotics of the RWTH (IGMR)**.

Collaborated with multiple master students automating the disassembly of EV batteries using robotics. Designed and fabricated multiple 3D-printed gripper prototypes and developed ROS nodes to enhance robotic manipulation capabilities for battery disassembly.

2022 - 2023 **Bachelor Thesis development in the Factory Automation department of Siemens, Nuremberg, Germany**.

Project consisted in the evaluation of different design and control methods for programming force-controlled movements in a PLC controlled robot production cell.

2021 – 2022 **Manufacturing Engineering internship in the Hologic Surgical Products Costa Rica Facility**.

Provided support to engineers across multiple assembly lines, focusing on manufacturing process optimization, reducing scrap material and efficiency improvement.
Designed and implemented an IoT system for real-time machine status monitoring, enhancing operational visibility and proactive maintenance.

2021 **Process automation project in the Cooper Standard Costa Rica Facility**.

Led a process automation project at Cooper Standard, successfully integrating a collaborative robot to streamline operations.

Metal prototyping workshop assistant in the Instituto Tecnológico de Costa Rica.

In charge of reconditioning old CNC machines.

2019 **Internship in Volkswagen AG, in the department of Energy Efficiency and Air Conditioning, Wolfsburg, Germany**.

Contributed to research investigations on human factors in autonomous vehicles, including sleep patterns and novel applications of wearable technologies.
Assisted in the review and evaluation of advanced heating and ventilation systems for automotive seating.

2018 – 2019 **Student tutor of the class Electric Machinery in the Instituto Tecnológico de Costa Rica**.

In charge of preparing and presenting exercise sessions to a group of approximately 20 Students 2 hours per week.

Soft Skills

- Proactive
- Team Worker
- Problem Solver
- Learn it all attitude

Francisco Gonzalez Rosabal, Nuremberg, 06.02.2026