# Gabriel Torres

+506 8664 6227 | gabriel.torres.garbanzo@gmail.com | linkedin.com/in/gabriel | github.com/gabriel

#### EDUCATION

## University of Costa Rica

San Pedro, San José

Bachelor's degree in Electrical Engineering, Honor Graduation

March 2019 - Feb. 2024

#### University of Costa Rica

Bachelor's degree in Computer Science, In Progress

San Pedro, San José March 2025 – Expected 2028

#### EXPERIENCE

# Project Engineer Assistant

October 2023 - February 2024

Sistemas IQ, SIQ S.A.

Uruca, San José

- Collaborate with cross-functional teams to define project requirements
- Programming PLC systems and configuring HMI interfaces
- Participation in the start-up of the systems, implementing customized programmed tools

#### Project Engineer I

February 2024 – July 2025

Sistemas IQ, SIQ S.A.

Uruca, San José

- Advanced design and programming of control algorithms on open and private platforms
- Design and implementation of automated systems for manufacturing
- Leadership in start-up activities, ensuring effective integrations and monitoring in real time
- $\bullet\,$  Design of test and trouble shoot systems to ensure performance and compliance

# Undergraduate Research Assistant

Aug. 2022 – Jan. 2023

University of Costa Rica

ARCOSLab, Engineering Research Institute (INII)

 $\bullet$  Developed a sensor prototype to generate and measure three-dimensional forces applied to a humanoid robot

# PROJECTS

MIPI Depth Application  $\mid C++$ , Jetson Nano, Jetson Inference, GStreamer

Oct. 2023 – Dec. 2023

- Capture video from a MIPI camera and estimate the distance to objects using Monocular Depth
- Streamed displaying the depth map in color encoded in H.264 using hardware acceleration
- Used jetson-inference framework to create the application based on C++

High-Speed Channels Characterization | Git, Altium Designer, Cadence AWR

Feb. 2023 – May 2023

- Characterized high-speed channels based on the USB 3.0 standard using multi-layer PCB technologies
- Documented the design, integration, and validation process, utilizing a Vector Network Analyzer (VNA)
- Intel EP and EI Hands-on Workshop Design Challenge Third Place winner group

Three-axis Force Sensing System | Electronic Design, Calibration, STM32F3, C

Aug. 2022 – Jan. 2023

- Designed a system to measure interacting forces between itself and the body of a humanoid robot
- Developed an application to collect and process data in soft-time response on C
- Article presented at the "IEEE Colombian Caribbean Conference" in 2023

#### TECHNICAL SKILLS

**Programming languages:** Bash, Python, C/C++, Verilog, SQL

Softwares: Matlab, Altium Designer, Cadence AWR

Developer Tools: Github, Docker, VS Code, Visual Studio

Languages: Spanish (Native), English (Advanced)

# SOFT SKILLS

- Able to work under pressure
- Able to interact with customers worldwide
- Fast and self-oriented learning
- Creative and innovative solutions
- Passion for problem solving