Karina Ruiz-Tron

📞 +52 1 5572121753 ✉ karina.rtron@hotmail.com in [LinkedIn](#) ⌗ [Karirut](#)

Summary and Personal Objective

I am a Robotics and Digital Systems Engineer student. I am seeking for a professional experience on embedded systems and manufacturing robotics. People recognize me for my leadership skills in team projects. I have a growth mindset, resilience and flexibility essential to ensure excellent results in my work. One of my main goals is to grow professionally while working my coworkers to achieve our and the company's goals.

Academic Background

Robotics and Digital Systems Engineering **August 2021 – July 2025 (Projected)**
Instituto Tecnológico y de Estudios Superiores de Monterrey Campus Ciudad de México *Mexico City, Mexico*
20% Scholarship

- **Intel Corporation** **February 2023 – March 2023**
  Final Project of Programmable Logic Design
  * Design the first phase of an intelligent embedded system (Cyber-Physical System or CPS).
  * Use of FPGA (field programmable gate array).
  * Use of peripheral component such as a joystick in charge of controlling the game programmed.
- **Beautiful Patterns** **Summer 2022 & 2023**
  Instructor
  * I taught web design lessons to girls between ages 12 to 17 in a one weeklong camp where they learned computational development in the languages of HTML, CSS and Java.
  * As second objective, I inspire the participants to be interested in STEM areas.

Experience

HACKMX5 - Third Place Winner **October 2023**
Emergency response using signal processing systems *Mexico City, Mexico*
- Interpretation and transcription of 911 calls with the objective of classifying those who may be prank calls or the ones that require immediate attention. Apart from the software part, it also contains a display which showed who was calling and the location of the incident, plus an integrated alarm to inform the police or firefighters of the emergency.

Concurso Iberoamericano de Satéñites Enlatados - Semi Finalist **May 2023**
CANSAT *Mexico City, Mexico*
- I worked alongside other 4 teammates in the fabrication of a canned satellite that needed to send signals to the ground computer and to arrive safely protecting an egg in its interior.

Technical Skills

Languages: Spanish (Native Speaker), English TOEFL IBT 95 pts, French A1
Programming Languages: Python, C, C++, HTML/CSS, JavaScript, AVR Assembly
Technologies: ROS2, MATLAB/Simulink, Microcontrollers, Microsoft Office

Softskills

- Communication
- Leadership
- Teamwork
- Troubleshooting
- Work Ethic
- Critical Thinking
- Stress Management
- Inquisitive

Leadership / Extracurricular

Peer Program **August 2022 – Today**
Tutor
- I shared knowledge and experience with students in their freshman year to help them adapt to the school's campus and system, in order to be accepted, applicants must participate in psychologic tests and different interviews.

First EDS Student Meeting: climate change, problems and perspectives **June 2023**
Participant
- I participated in dialog tables with students in different careers and different campuses about climate change. There were also participating expertise in the field.

School Group Code.it   **August 2021 – June 2022**

Secretary

- My job there was close to the role of secretary, where I directed the group alongside the gourp's President and Vice-President. I also made a variety of events for engineering students in order to unify the community and promote the STEM fields.

School Group Ada Women   **August 2021 – June 2022**

Administrator of Social Activities

- I was in charge of directing activities focused on the benefit it would have in our community seen from a social perspective and respecting the group's objective to recognize women's work in STEM fields.