

First name LAST NAME

iwells.ar@gmail.com

+52 6461941236

github.com/IvanRomero03

linkedin.com/in/ivanromerow

EDUCATION

Monterrey's Technological Institute of Higher Education

Bachelor of Computer Science Engineering and Technology

Graduating in December 2025

GPA 97/100

WORK EXPERIENCE

Oneila

Software Engineer Intern

Monterrey, Nuevo León, México

June 2022 – January 2023

- Developed a scraper made with BeautifulSoup to keep track of articles information listed on eBay.
- Developed Unit testing and worked on the management of CI/CD and Git version control with Azure DevOps.
- Developed a Scraper with Crawllee and Puppeteer built to access public Mexican government data.

Micronics MX / Bustracker

Software Engineer Intern

Monterrey, Nuevo León, México

September 2021 – June 2022

- Helped on migration of pages from WordPress to React.js, and implementation of components based on ant design.
- Developed administrator pages for managing of business units and commercial groups, using React.js and Laravel.

MAJOR PROJECTS

RoboLinks

August – September 2022

Url shortener made for the RoBorregos team (Tec de Monterrey's International Robotics team).

- Developed a Next.js app, using React.js for the front-end and Chakra-UI for the UI Library.
- Implemented a RESTful API for the backend with MySQL as the DB, and Prisma as the ORM. Built with routing and API Tools from Next.js.
- Deployed the MySQL database with the RDS service of AWS and deployed the Next.js project on Vercel. rbrgs.com

IoT Warehouse

September – December 2022

A Warehouse system to manage and track material of the RoBorregos Development Laboratory

- Developed a Next.js app using React.js and Mantine for the UI, and used a MySQL DB deployed on AWS, Prisma and Socket.io for the Backend, and deployed it with Vercel
- Built a WebSocket server with node and Socket.io to manage and communicate the physical cells, and the RFID authorization modules. And deployed it to AWS using the Elastic Beanstalk service

IROS @Home Simulation

August – October 2022

- Developed and integrated the machine vision algorithm for the competition using ROS and Python.
- Developed and trained the object detection pipeline using Python and TensorFlow.
- Implemented a human pose estimation system using Python's OpenVision and the pretrained model from MediaPipe.

RoboCup Junior Rescue Maze

January – May 2022

A Robotics automatization competition, based on the rescue of victims in a dangerous scenario.

- Implemented a navigation algorithm using Dijkstra's algorithm and made an integration with Robotics Operating System (ROS) framework to control sensors and actuators via serial communication.
- Implemented a computer vision algorithm and developed an image classification model by implementing a Convolutional Neural Network (CNN) using TensorFlow to detect lettered and colored visual victims in the stage.

Mexican Informatics Olympiad

2019 - 2021

- Participated in the regionals at Baja California, Mexico. Coding in C++.
- Won Bronze (2019), Silver (2020) and 5th place (2021) at the regional qualifying stage

SKILLS

PROGRAMMING LANGUAGES

3 years: Python, JavaScript
2 years: C/C++, TypeScript
6 months: PHP, Matlab

TECHNOLOGIES

Next.js, MySQL, SQLite, Amazon Web Services (AWS), Azure DevOps Services, Heroku, RESTful API, Flask, Node.js, TensorFlow, C++, ROS, Arduino, React.js, Git, VS Code, Socket.io, Express, Unix/Bash, Prisma, Laravel, Insomnia, tRPC, OAuth

AWARDS

3rd Place – Meta Coding Competition Mexico Universities (2022)
5th Place – IROS 2022 (Japan) RoboCup @Home Simulation (2022)
4th Place – RoboCup Junior Rescue Maze (2022)

LANGUAGES SPOKEN

Spanish
English

Native
TOEFL iBT 92