Andrés de la Garza Rosales

+52 844-443-0576 | delagarza.rosales.andres@gmail.com | Monterrey, Nuevo León, México

EDUCATION

Tecnologico de Monterrey (ITESM)

B.S. in Computer Science and Technology   *Aug. 2022 – Jun 2026*

GPA: 96/100 | Academic Talent Scholarship

<u>Relevant courses:</u> Object-Oriented Programming, DSA, Implementation of the Internet of Things, Modeling of Minimum Systems and Computational Architectures & Analysis of Software Requirements.

EXPERIENCE

SorteosTec   Feb 2024 – May 2024

MySQL, Unity, Node.js, JavaScript
- Developed 3 games in Unity with an interconnected inventory to be embedded in the SorteosTec website.
- Engineered and implemented the database necessary for the games in MySQL, including metrics and a wallet for every user.
- Connected the games to the webpage and the database with node.js endpoints and post requests from Unity C#.

MIT Beaver Works Summer Institute Online Course TA   Sep 2023 – Dec 2023

Python
- Instructed intermediate and advanced python specifically based on the Autonomous Cognitive Assistance (Cog*Works) course from BWSI.
- Tutored seven students on machine learning with python 4 hours per week.

VEX Robotics ITESM2 Programmer   Oct 2022 – Jun 2023

C++, Git, GitHub, HTML, CSS & JavaScript
- Earned an Excellence Award in the national STEM championship and the **Create Award** in the **VEX U Robotics World Championship**, the largest robotics competition in the world.
- Developed the autonomous routines and manual controls for the two robots of the team, including the implementation of a PID controller for a flywheel and an odometry system to coordinate to correlate the robots' positions with the map's elements utilizing the PROS library for C++.
- Made a simulator for the game using JavaScript, HTML and CSS to find and try new game strategies. It included a mode that utilized A.I. through a genetic algorithm to find viable paths for the robots in the autonomous routines.

COVID-19 variants' analysis   Mar 2023 – May 2023

R
- Retrieved over 10 COVID variants' sequences from biological databases. This analysis involved the creation of phylogenetic trees and their hierarchical structure using R and specialized libraries.

Math Olympiads' TA   Jan 2018 – Nov 2021
- Taught combinatorics and number theory to over 30 middle-school students for the Mexican Math Olympiad of Basic Education as a part of the state's OMMEB selection process.

AWARDS

ICPC   Mar 2024 - Now

C++
- Member of the team currently ranked #7 in the mexican 2025 ICPC cycle.

Rocket Hackathon   Jun 2024

Python
- 2nd place in the Arca Continental's challenge "Anticipating and identifying possible customer churn".

Mexican Math Olympiad   2019 - 2022
- Three times selected as one of the six representatives of Coahuila in the Mexican Math Olympiad (OMM).
- Winner of a bronze and a silver medal.
- Semifinalist in the mexican IMO selection camp.

TECHNICAL SKILLS

Languages: Arduino, C++, JavaScript, MATLAB, Python, C#, R & MySQL

Other: Unity, CSS, HTML, Git & GitHub