Arturo Ramos Martínez

linkedin.com/in/Arturo | github.com/Arturo | +52 438 118 4550

Education

Monterrey Institute of Technology and Higher Education Expected graduation date: Jun 2026
B.S. in Computer Science and Technology *GPA: 93.4/100*

Relevant courses: Data structures and algorithms (C++), Math and data science for decision making (Python), Object-oriented programming (C++), Software construction and decision making (JavaScript).

Projects

XAVIO AI (Educational web) | *Next.js, Express, MongoDB, openAI* Feb. 2024 - Jun. 2024

- Collaborated on a team project, Xavio, supervised by teachers and our training partner, Wizeline.
- Xavio is an educational website that leverages AI (OpenAI) to create and manage courses, quizzes, and tasks.
- Contributed to both front-end and back-end development, improving my full-stack skills and project design.
- Led the integration of web sockets to enable real-time chat functionality, facilitating improved communication among users.
- Received positive feedback and acceptance from teachers and Wizeline representatives for the innovative and practical approach of Xavio.

Booking website | *Express, MySQL and React.js* Aug. 2023 - Dec. 2023

- Collaborated within a team to develop a full-stack website that facilities laboratory reservations at the university's medicine building.
- Designed and implemented the database structure to efficiently manage reservation data, following database design principles.
- Led the development of the back-end, creating an API to handle reservation requests and ensuring correctly data storage and updates in MySQL.
- This website was a proposal to be implemented as the booking system at the university.

Car plate registration Web | *Express, MySQL, React.js, Pytesseract, CV2 and Arduino* Sep. 2023 - Dec. 2023

- Collaborated in the development of a full-stack web application for car plate detection and registration, with the aim of enhancing the efficiency of visit registration in gated communities.
- Implemented two views within the web: one for security personnel and another for residents, facilitating interaction tailored to each user's role.
- Utilized the OpenCV (CV2) and Pytesseract libraries in Python to process images captured by the camera for car plate detection and recognition.
- Functionality was demonstrated through the integration of a proximity sensor for triggering image capture. A small-scale simulation was conducted using Arduino components, and we received valuable feedback and acceptance from experienced teachers.

Realm of Powers (game) | *C++* Apr. 2023 - Jun. 2023

- Developed in team, a text-based role-playing game, using object-oriented programming principles within the terminal environment. Involves fighting different enemies and trying to advance to the next world with different elements and themes.
- Implemented character customization, allowing players to choose their characters' abilities, such as different types of powers and attacks.
- Designed interactive decision-making mechanics based on available attacks, items, and life bars to enable strategic game-play and progression.
- Collaborated in the planning and documentation, creating its respective class diagram to ensure the functionality and correct usage of OOP principles and paradigms.

Technical Skills

Languages: C++, Javascript, Python, PHP.
Technologies and Tools:Express, MySQL, MongoDB, Git, Github and VS code.