

EDUCATION

B.Sc. in Mathematics | School of Sciences (Facultad de ciencias, UNAM) [🔗](#)

August 2023 - ?

Bachelor's in pause. Abstraction and logic reasoning and mathematics problem solving skill demonstrated.

Relevant courses: analytic geometry.

B.Sc. in Computers Systems Engineering | Superior School of Computer Sciences (ESCOM, IPN) [🔗](#)

January 2021 - ?

Learned software system designs, programming in depth and how computational system works.

Relevant courses: operatives systems, systems designs, artificial intelligence and design and analysis of algorithms.

T.D. in Information Technology | Center of Scientific and Technological Studies 13 (CECyT 13, IPN) [🔗](#)

August 2017- June 2020

Major in Information technology in high school focused on software development, mainly oriented in desktop and web apps.

Relevant courses: web development, databases and advanced programming.

PROJECTS

ALXMR URL Shortener | Tool for generating short URLs from any web address [🔗](#)

March 2024

- Created a URL shortener using **JavaScript (React/TypeScript)** for the client app and **Java (Spring Boot)** with **PostgreSQL** for the backend. The application was deployed on a cloud service, enabling requests via a custom domain.
- Developed an API REST service that handles various types of HTTP requests, including user requests that redirect users to their desired URLs..
- The client app enables users to generate short URLs either with a custom back-half or via an autogenerated URL. Additionally it provides an option for tracking and analyzing the usage of these shortened URLs.

Registration system for new students | Web app about students account registration [🔗](#)

July 2023

- This web application was developed using **HTML5**, **CSS3**, **JavaScript (with AJAX)**, and integrated with **PHP** and **MySQL**. The website was hosted locally using XAMPP.
- Made it to register new students into the system and assigning them an inscription date depending on the availability of classrooms.
- The app was designed with a login that allows you to register, for students an schedule will be generated with an hour and date in an available classroom. The role of admin will let you to reschedule any date of any student depending of the availability updating the data from the database.

Interprex | An interpreter using a standard syntax [🔗](#)

May 2023

- The app was built using **Java** that allows the user program control structures and made different operations.
- The code goes through tree stages: scanner, parser and semantic analyzer. Using different concepts of computer theory like formal languages and finite automata.
- The app was developed applying object-oriented programming and with different data structures to perform different operations like arithmetic operations, control structures and assignment operations.

For a list of some projects I've done, visit my portfolio: alexismrosales.github.io [🔗](#)

SKILLS

- **Programming languages: (familiar)** Java (Spring boot) Python, HTML/CSS, JavaScript (React/Typescript) and C++ for competitive programming (**beginner**) Prolog mainly oriented for AI and PHP.
- **Languages:** Intermediate level of **English (B2)** and Spanish (Native).
- **Operative systems:** Linux (Ubuntu and Manjaro) and Windows.
- **Database systems: (familiar)** Microsoft SQL and MySQL, (**beginner**) PostgreSQL .
- **Data analysis tools: (proficient)** Excel (**beginner**) Pandas, NumPy, Jupyter Notebooks and Tableau for data visualization.
- **Others:** Git, Microsoft Office Suite (Word, PowerPoint and Project) and bash scripting knowledge.

COURSES AND APPRENTICESHIPS

- **Data visualization in Excel**, Introduction to data science in Python and **Introduction to Tableau** at Datacamp.
- **Introduction to artificial intelligence** by CIC (IPN).
- **Automate the Boring Stuff with Python Programming** at Udemy.

LEADERSHIPS

- Participant of the **Chatbot contest** created by Oracle and **AI4GOOD**.
- Project presenter and participant of contest **Proyecto Aula** by IPN.