

# Alfredo Puentes Vargas

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## EDUCATION

### Instituto Tecnológico de la Laguna

B.Sc. in Computer Systems Engineering

Torreón, Coah.

Aug. 2022 – Dec. 2026

### Centro de Bachillerato Tecnológico, Industrial y de Servicios No. 4

Technical High School, specialization in Programming

Lerdo, Dgo.

Aug. 2019 – Jul. 2022

## PROJECTS

### Salud Universitaria | HTML, CSS, PHP, Javascript, MariaDB, Figma

Mar. 2025 – Jun. 2025

- Developed a prototype of an integration to the official website of Instituto Tecnológico de la Laguna that implements a medical appointment scheduling system for students and an appointment management system for specialists.
- Collaborated through GitHub and was mentored by a Engineer from the institution.
- The software includes user account management, appointment scheduling, specialist view, admin view and dynamic calendar.

### ChambApp | Android, Kotlin, Java, Firebase, Gradle, Google Play Services

Sep. 2025 – Oct. 2025

- Implemented a mobile application to promote and increase the visibility of small local services as a solution to the economics problem presented in the regional stage of HackaTec 2025.

### SKAAN | Flutter, Dart, Kotlin, FastAPI, Gemini AI

Oct. 2025

- Mobile application that uses the device's camera to scan, identify, and classify liquid containers in real time using Machine Learning.
- The system automatically determines whether a package complies with airport security regulations, verifying aspects such as the package volume, the condition of the package and its conformity with international regulations.
- Presented at HackMTY 2025 as a solution to the Smart Execution problem presented by the company GateGroup.

### Insight Flows | React, NodeJS, Javascript, Gemini AI, MariaDB

Jun. 2025

- Web application developed as a project during the local stage of HackaTec 2025.
- Built a software solution for inventory management, logistics, and business process automation. Implemented Gemini AI to provide users with intelligent alerts and recommended actions to streamline company and inventory management. The application generates charts and projections to visually support statistical understanding.

## ADDITIONAL EXPERIENCE

**HackaTecNM 2025.** Participation in the Local stage in June, in the Regional stage in September, and qualification for the national stage.

**HackMTY 2025.** Participation in the tenth edition of Latin America's largest Hackathon, held in October at Tecnológico de Monterrey. A solution was presented for the problem that GateGroup presented to my team and me.

**ICPC, Gran Premio de México.** Participation in the first qualifying stage of 2024 and in all three qualifying stages of 2025.

**Volunteer Instructor.** Delivered workshops on *Fundamentos de Programación* during the Jan. - Aug. 2024 semester, and on *Programación Orientada a Objetos* during the Jan. - Aug. 2025 semester, contributing to the learning of approximately 45 peers in my degree.

**Programming Competitions.** Participation in the *DataWeek 2025* programming contest organized by Universidad Autónoma de Coahuila and in the national programming contest *Coding Cup TecNM 2024*.

## TECHNICAL SKILLS

**Languages:** Java, C/C++, C#, SQL, JavaScript, HTML/CSS, PHP, Kotlin, Haskell, Bash, Assembly

**Frameworks:** React, NodeJS, Qt

**Development Tools:** Git, VS Code, Visual Studio, IntelliJ, NetBeans, Android Studio, Figma