# **Jacob Flores**

#### **Education**

# **Intelligent Systems Engineering**

Universidad Autónoma de San Luis Potosí (UASLP)

Expected Graduation: December 2023 San Luis Potosí, México

• Relevant Coursework: Data Structures and Algorithms, Web Development, Interface Design, Database Fundamentals and Design

## **Professional Experience**

#### **Technology Manager**

June 2023 – present | San Luis Potosí, México

AIA Partners 🛮

- Led and mentored a team of 5 developers to scale, maintain, and create multiple projects and algorithms, expediting the development process. Employed Express.js, Mongoose, MongoDB, Postman, and Vue for robust API and frontend development.
- Achieved a significant 30% speed improvement in deployment by migrating from a polyrepo to a monorepo, leveraging Turborepo's advantages, including remote caching and multitasking. Streamlined project deployments with Vercel.
- Overhauled the hiring process, interviewing 10+ candidates, resulting in the successful recruitment and onboarding of 4 talented frontend, backend, and full-stack professionals.

Frontend Developer

June 2022 – June 2023 San Luis Potosí, México

AIA Partners 🛮

- Developed a web dashboard utilizing Chart.js, providing investors immediate access to their investment progress, thereby enhancing the negotiation process and building trust with over 10 investors.
- Engineered user-friendly interfaces with Vue 3 based on Figma mockups, incorporating composables for reusable stateful logic, Pinia Stores for global state management, Vue Router Navigation Guards for route validation, Vue I18n for bilingual support, and VeeValidate to manage Forms.
- Operated TanStack Query for managing asynchronous state with the Web Fetch API for data fetching and mutations, maximizing caching capabilities, and applying Query Invalidation for fresher data retrieval, enriching performance and loading times.
- Upgraded user experience by lazy-loading images with Cloudinary AdvancedImage, <img> attributes, and skeleton loaders.

#### **Projects**

Nourish ☑

June 2023

Mobile-first web application to tackle food insecurity in students

- Orchestrated the development of a mobile-first web application that harnessed Next.js and Tailwind for the frontend, Firebase for backend functionality, and incorporated the OpenAI API for generating AI-driven recipes spanning 17 ingredients.
- Collaborated with a multidisciplinary team during the **WaffleHacks 2023 Hackathon** 🖸 , partnering with a nutritionist from Universidad de Guanajuato. This collaborative effort resulted in the intersection of technology and nutrition.

## Sports League Management

March 2021 – February 2023

Web platform to manage sports events to optimize processes for organizers

- Collaborated in crafting a robust API with over 40 endpoints, implementing bcrypt and JWT for user authentication, Express.js for backend development, and Postman for API testing.
- Designed a normalized relational database using MySQL Workbench, comprising 27 tables. Implemented the database with Sequelize ORM, incorporating scopes for query reuse. Used seeders to automate the creation of predefined records.

#### **Extracurricular Activities**

StuDevs Administrator 🛮

June 2023 – present

Computer Science Club

- Coordinated and organized impactful talks and events, benefiting over 130 members, including students and professors.
- Delivered a compelling talk at the UASLP Faculty of Engineering Auditorium, addressing over 60 people, sharing insights on Studevs and its significant impact on personal and professional growth.
- Discussed NASA Hackathon experiences on the UASLP radio program "Divagando y Divulgando", reaching a local audience.

## Finalist 2023 NASA International Space Apps Challenge 🗵

October 2023

Immersive platform designed to educate users on the significance of ocean gardens

- Built **Ecotide** 🖾 utilizing Next.js with the App Router for seamless Server and Client Components, TypeScript, TailwindCSS, and the <model-viewer> library to showcase interactive NASA 3D models.
- Achieved recognition as a finalist project in the social challenges track for providing an immersive platform that educates users about ocean gardens through 3D models, images, videos, and audio, enhancing the overall educational experience.
- Showcased Ecotide to a jury and an engaged audience of over 50 individuals at Universidad Aeronáutica en Querétaro.

#### **Skills**