

Adrian Lara

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EDUCATION

University of Illinois Urbana-Champaign, Grainger College of Engineering

August 2022 - May 2026

Bachelor of Science, Computer Science

Urbana, IL

- **GPA: 3.89/4.0**
- **Minor:** Hoefft Technology & Management
- **Awards:** Hispanic Scholarship Fund Scholar, Illinois Engineering Premier Scholar, President's Award Program Honors Scholar
- **Relevant Coursework:** Data Structures, Algorithms & Models of Computation, Database Systems, Systems Programming, Probability and Statistics

TECHNICAL SKILLS

- **Languages:** C, C++, Python, JavaScript, SQL, Kotlin, Java
- **Frameworks:** React, Next.js, Three.js, FastAPI
- **Libraries:** React, NumPy, Pandas

WORK EXPERIENCE

Air Force Research Laboratory

May 2024 – August 2024

Research Intern

Dayton, OH

- Improved and modularized a full-stack CAD model software using HTML, CSS, Three.js, JavaScript (front-end), and Python with FastAPI (back-end), improving performance by 5x and enhancing user functionality.
- Designed and implemented a scalable, well-documented API architecture with FastAPI, reducing integration time for CAD tool plugins by 50%, streamlining server routing, and enabling seamless cross-platform software distribution within the Department of Defense.
- Redesigned and optimized the user interface for CAD and Radio Frequency tools, reducing load time by 2x, improving responsiveness across all devices, and implementing dynamic real-time error handling.

University of Illinois Urbana-Champaign

December 2022 – Present

Course Assistant for CS 128 – Introduction to Computer Science II

Urbana, IL

- Provide weekly one-on-one technical assistance to 15+ students on advanced topics like memory management, resulting in an increase in student problem-solving capabilities.
- Devise practical examples to explain complex programming principles, enhancing students' understanding of essential software engineering skills.
- Facilitate weekly recitation sessions with 30+ students, receiving positive feedback for enhancing their comprehension of C++ programming and promoting problem-solving confidence.

LEADERSHIP

Black, Indigenous, and Latinx in Tech (B[U]ILT)

August 2023 – Present

Treasurer/Vice President

Champaign, IL

- Lead a non-profit student organization with over 50 members, creating a supporting community for minorities in computing and enhancing diversity within the field.
- Utilize project management and organizational skills to plan and execute over 20 successful events, increasing member engagement by 50% and boosting average event participation from 10 to 30 attendees.
- Streamline treasury operations by implementing a new accounting system, improving reimbursement efficiency by 75% and ensuring accurate financial tracking.

PROJECTS

TrendHub | React, Node.js, MySQL, Google Cloud Platform

June 2023 – August 2023

An application that grants users the ability to view YouTube video trends in the USA, while allowing them to compare their own videos with these trends using their own data.

- Implemented a comprehensive user account system, enhancing user engagement and data personalization via point ranking system.
- Orchestrated the seamless integration of a MySQL database on Google Cloud Platform with Node.js backend and React frontend, optimizing query performance and reducing data retrieval latency.

TimeStamp | HTML, JavaScript, Node.js, Google Calander API

January 2023 – May 2023

A Chrome extension that allows user to highlight an event and its information, then seamlessly add it to their Google Calendar.

- Ensured accurate and reliable data extraction by incorporating regular expressions and data validation techniques, resulting in precise event information for Google Calendar integration.
- Engineered efficient communication protocols between the frontend and background.js component, reducing latency and enabling real-time event addition with 100% success rate.