David Valarezo

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Education

Cornell University, College of Engineering

Ithaca, NY

B.S in Computer Science, Minor in Business

Expected May 2027

GPA: 3.74

Related Courses: Discrete Structures, Statistics and Probability, Object Oriented Programming and Data Structures, Introduction To Backend Web Development, Linear Algebra, Multivariable Calculus

Project Experience

Obligo Remote

Full Stack Web Developer

June 2024 - Aug 2024

- Developed a web app to manage families and obligations, leading to improved accountability within households
- Conducted user interviews to gather feedback and refine features, enhancing effectiveness and user satisfaction
- Enhanced user experience by designing a responsive interface with Next.is, React, and MUI components
- Streamlined data management by creating a RESTful API with Node.js and Express.js, enabling efficient CRUD operations on a MongoDB database, significantly reducing data retrieval time and improving overall performance
- Integrated user authentication using JWT and created global state management for efficient data display

Lagos Food Bank, Cornell Hack4Impact

Ithaca, NY

Full Stack Web Developer

Mar 2024 - May 2024

Apr 2024 - May 2024

- Collaborated with 10 peers to develop a website that organizes 19,000 active volunteers for a food bank in Nigeria
- Utilized Node is and Express is to create endpoints for seamless interaction with Firebase database
- Developed interactive components in React and TypeScript for efficient sorting and displaying user data
- Received and incorporated feedback to make improvements and maintain code quality according to best practices.

Intelligent Image Selector

Ithaca, NY

Developed a Java Swing GUI allowing users to upload, crop images with polygons, and save them locally

- Created an intelligent scissor mode using color weights and Dijkstra's algorithm for more accurate edge detection
- Reduced processing time for edge calculations by 40% using a heap-based implementation of Dijkstra's algorithm
- Applied extensive JUnit testing to ensure reliability of image cropping and intelligent scissor features

Lost and Found App

Ithaca, NY

Backend Developer

Java Developer

Apr 2024 - May 2024

- Implemented various RESTful endpoints to facilitate communication between the Swift frontend and backend
- Designed the backend using Python and Flask, and implemented the database model using SQLAlchemy
- Deployed the Dockerized backend onto Google Cloud VM instances, enabling online hosting and accessibility

Hackademics Remote

Lead Backend Developer

Dec 2022 - Feb 2023

- Created a website dedicated to teaching local students humanities and STEM with 2 peers
- Developed the backend in Python with Flask as the framework and sqlite3 to store user information
- Coded features such as login/signup, email verification with JSON web tokens, and password hashing

Leadership Experience

Cornell Bowers CIS ASCEND Program

Ithaca, NY

Intern

- Sep 2023 Present Highly selective two-year exploratory program designed to support incoming freshmen into a future career in tech
- Collaborating with a small team and industry mentors to develop and refine a startup concept and pitch

Skills

- Languages: Java, Python, SQL, TypeScript, JavaScript, HTML/CSS,
- Frameworks/Developer Tools: React, Node.js, Express.js, Flask, JUnit, Git, Docker, VS Code, IntelliJ