Isabella Correa

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EDUCATION

Bachelor of Science in Computer Science   **Expected December 2026**

Florida International University (FIU); Miami, FL

- GPA: 3.7 | (CS Coursework): 3.9 | Deans List: Fall 2024, Spring 2025
- Coursework: Data Structures, Software Engineering 1, Computer Architecture, Systems Programming, Net-Centric Computing, Operating Systems, Artificial Intelligence

SKILLS

Programming Languages: Java, C, Python, Javascript, TypeScript, HTML, CSS, Golang, SQL
Frameworks/Libs: React.js, Next.js, Node.js, Express.js, FastAPI, RESTAPI, Django, Firebase, Google ADK, JavaFX, WebGPU, PIL
Developer Tools: Linux, Git, Docker, Vite, Vue, MongoDB, Manifest V3

PROJECTS

Relational Database Engine in Go   **July 2025 - Present**

- Designed a full relational database management system from scratch in Go.
- Implemented a storage engine, a SQL query parser, and B-tree indexing.
- Built core database operations (Create, Insert, Select, Update, Delete).

FIU Student Planner | ShellHacks 2025 - devpost.com/software/fiu-panther-planner   **September 2025**

- Chrome extension integrating FastAPI backend, MongoDB database, and Manifest V3 frontend to deliver AI-powered course tracking, schedule building, and campus navigation using the Google Maps API.
- Implemented Google ADK with custom tools for course retrieval, prerequisite validation, and semester planning.

Particle Physics Simulator | izy138.github.io/ParticleSim   **May 2025**

- Engineered a real-time particle physics simulator in JavaScript and with HTML/CSS, leveraging WebGPU for high-performance rendering and user interaction.
- Developed an optimized render and compute pipeline to simulate thousands of particles.

Intelligent Notes | Demo at 10:50 - youtu.be/hVVNb0Lfw4I   **January 2025**

- Led a team of four to design the application, manage project milestones, and ensure all deadlines were met.
- Developed a note taking app with search, real-time editing, and a tag-based labeling system using JavaFX.
- Integrated Claude API to generate summaries of notes and folders.

Kanban Board | izy138-kanban.vercel.app   **November 2024**

- Engineered a full-stack Kanban board with drag-and-drop functionality, real-time updates, and task management features, with React and Node.js

WORK EXPERIENCE

RedPeak - Redpeak.ai | Miami, FL   **May 2025 - August 2025**
Frontend Developer Intern

- Collaborated with the designer to create responsive React components using TypeScript and TailwindCSS
- Engineered all page animations and responsive UI elements, improving user experience to increase engagement
- Optimized core Python scripts, resolving prompt-content mismatch issues and increasing the overall relevance of generated books

Kasiopya.com | Miami, FL   **July 2025 - Present**
Freelance Shopify Developer

- Implementing custom features using Shopify's template language Liquid
- Created custom templates for customized popups, photo displays/carousels, and product filtering

Florida International University | Miami, FL   **August 2025 - Present**
Teaching Assistant

- Coordinating with Professor Abdul Rehman for Software Engineering 1, Programming 1 and 2 lectures and exams