ISABELLA CORREA

isabellapc97@gmail.com ~ (786) 521 0721 ~ izy138-portfolio.vercel.app ~ github.com/izy138

EDUCATION

Bachelor of Science in Computer Science   **Expected December 2026**
Florida International University (FIU); Miami, FL
- GPA: 3.71 | (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, C++, Python, Golang, Javascript, TypeScript, HTML, CSS, SQL
Frameworks/Libraries: React, Node.js, Next.js, Express.js, Django, JavaFX, TailwindCSS, WebGPU, PIL, Firebase
Developer Tools: Linux, GitHub, Docker, Maven, Vite, Vue

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)

Kasiopya | Kasiopya.com   **July 2025 - Present**
- Implemented custom features using Shopify's template language Liquid
- Created custom templates for customized popups, photo displays/carousels, and product filtering

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   **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
- 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 and visual appeal of the site to increase user engagement
- Optimized core Python scripts, resolving prompt-content mismatch issues and increasing the overall relevance of generated books

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