

Fernando Crespo Vazquez

561-814-6995 | crespofernando05@gmail.com | [linkedin.com/in/fernando-crespo-vazquez](https://www.linkedin.com/in/fernando-crespo-vazquez) | github.com/crespofer

EDUCATION

University of Central Florida

Orlando, FL

Bachelor of Science in Computer Science - 3.9 GPA

Aug. 2023 – May 2027

Coursework: Data Structures and Algorithms, Object Oriented Programming (Java), Systems Software

EXPERIENCE

Software Engineer Intern

September 2025

Lockheed Martin

Orlando, FL

- Incoming and joining the Software Engineering team

PROJECTS

DigiConvo | *React, Next, Gemini, tRPC, Zustand*

June 2025

- Engineered an AI conversation simulator utilizing **Next.js** for optimized server-side rendering and performance
- Leveraged **Google Gemini AI** to implement robust voice integration for seamless natural language interaction
- Built a robust backend with **tRPC** to ensure type-safe end-to-end efficient data handling between client and server
- Managed complex application state and user interactions efficiently using **Zustand**, enhancing maintainability

Kestrel Autonomous Drone | *Python, NumPy, PyTorch*

May 2025 - Present

- Working in a **6** member machine learning team to implement **DeepSORT** for real-time tracking of PEV riders
- Contributed to development, review and testing of **5** cost functions powering detection-track matching logic
- Developed a **Convolutional Neural Network** to detect and embed visual features for object re-identification, supporting continuous multi-object tracking.
- Integrated DeepSORT tracking into a **ROS node** for real-time communication with other drone systems.

Public Notes | *React, Next, AWS S3, tRPC, PostgreSQL, TypeScript, Tailwind*

May 2025 - June 2025

- Built a scalable note taking platform for university courses, with role-based access for admins to approve content
- Integrated **AWS S3** signed URLs for dynamic file storage, ensuring scalable and secure cloud-based file handling
- Automated stale data cleanup via **AWS Lambda** triggered by **Amazon EventBridge** and monitored with **CloudWatch Logs**
- Implemented **tRPC APIs** to enable user interactions and streamline communication between client and server

Calc Visualizer | *React, Express, MongoDB, TypeScript, Tailwind*

January 2025 – April 2025

- Designed a calculus visualizer web app with **24** interactive custom made graphs to help college students
- Utilized **React** for an engaging user experience and **Express** to handle requests
- Populated a **MongoDB** database using **Prisma** to store data and ensure secure user authentication
- Leveraged the **Google Gemini API** to provide AI explanations for custom user created graphs

F1 Database | *React*

November 2024

- Developed a web application to view F1 race results
- Integrated a **RESTful API** to fetch and dynamically display **1,100+** race results
- Utilized **React** and **CSS** to build an interactive frontend that maximizes user interactivity

TECHNICAL SKILLS

Languages: C, Java, Python, JavaScript, TypeScript, HTML, CSS

Frameworks/Libraries: React, Nextjs, Express, Tailwind

Tools: Git, GitHub, Prisma, Windows, Linux

Language: Spanish

ON-CAMPUS INVOLVEMENT/AWARDS

- Association for Computing Machinery May 2025 - Present
- Knight Hacks Club October 2024 - May 2025
- President's Honor Roll December 2024
- President's Honor Roll May 2024
- Dean's List December 2023