Jay Patel

Macon, GA   https://github.com/jayp822   https://www.linkedin.com/in/jay-d-patel   https://jaydpatel.com

Education

University of Georgia   Dec 2024
Bachelor of Science in Computer Science (3.83 GPA)   *Athens, Georgia*

Professional Experience

United States Air Force   May 2024 - Aug 2024
Software Developer Intern   *Macon, GA*

- Worked on the Distributed Aperture System team, focused on retrieving and displaying video from six optical sensors onthe F-35 fighter jet.
- Developed a WPF client-server application that emulated F-35 control inputs via joystick, enabling direct modificationsto components in the F-35 panel through a TCP connection.
- Gained security clearance required for military base operations.
- Identified and resolved memory leaks, resulting in a 50% reduction in memory usage and improved frame rate stability on the flight simulation pilot panel.

DevDogs   Aug 2024 - Dec 2024
Frontend Developer   *Athens, GA*

- Developed dynamic frontend pages for the Optimal Schedule Builder and DevDogs website using modern frameworks, including NextJS, React, and TypeScript.
- Collaborated closely with UI/UX teams to refine user experience, focusing on enhancing accessibility and usability for students using the Optimal Schedule Builder.
- Contributed to the project's open-source GitHub repository, managing issues and guiding other developers through problem-solving and feature implementation.

Projects

F-35 Joystick Simulation   Jun 2024
C++, C#, XAML

- Engineered and implemented a client-server joystick emulation application using Windows Presentation Foundation(WPF) and TCP connections, enabling seamless interaction with the F-35 simulation environment.
- Leveraged XAML to design intuitive user interfaces, enhancing pilot control through the visual representation of variousF-35 joystick functions.
- • Integrated advanced features, including dynamic pilot view transitions via DAS sensor activation, triggered by joystick button inputs.

Application Ally   May 2024
React, Next.js, Tailwind CSS, MongoDB, Express, Node.js

- Developed a full-stack web application to streamline job application management for users.
- Ensured data consistency and reliability by implementing Mongoose schemas for MongoDB.
- Designed RESTful API routes with Node.js and Express to handle CRUD operations, enabling seamless data interaction between the frontend and backend.

Local Reports   Feb 2024
Node.js, MongoDB, JavaScript, React, Next.js, Tailwind CSS

- Competed in a hackathon with our idea to create a full-stack application focused on reuniting lost children with theirfamilies through social networking strategies.
- Enabled users to drop pins on a Google Map with details such as pictures, radius, coordinates, and missing child'sbiometric data, based on their role.
- Integrated Google Maps to visually display the last known locations of missing children.

Skills

Languages	Python, Java, C, C++, HTML/CSS, XAML, JavaScript, SQL, Lua, C#
Frameworks	FastAPI, Flask, NextJS, Express, Tailwind CSS, React, Tkinter
Tools	Git, Docker, Azure, Selenium