Syed Furquan Ahmad

+91 8210991146 | syed@nextdev.in | nextdev.in | github.com/furquan-lp

Experience

Research Engineer Oct 2023 – Present
Inflexion.ai *Melbourne, Victoria, Australia (Remote)*

- Built an AI 'researcher' by scraping data on given topics and transform it into articles using mutliple Claude 2 LLM agents
- Implemented a GPT4 blog writer content-gen API using FastAPI, applying the said research agent
- Redesigned parts of https://www.deciphr.ai/ using Webflow, Figma and CSS

Projects

NEXTDEV (Personal) | nextdev.in | *React, Tailwind, MUI, Node.js, Express, MongoDB, Redis* Nov 2022 – Present

- Built a responsive full-stack MERN website with a React frontend styled with Tailwind CSS
- Developed the backend as a Node.js Express server for fetching data from the MongoDB database and static assets
- Integrated Nodemailer in the backend for message posting to a custom email
- Implemented a Redis cache on Redis Cloud to achieve ∼4x faster response times
- Hosted the frontend on Vercel, the backend with DigitalOcean and the database on MongoDB Atlas

Frontend Portfolio | frontend.nextdev.in | *React, Next.js, TypeScript, Tailwind, SQL, Python, Flask* Aug 2023 – Present

- Developed a responsive website built with React and TypeScript to catalog the mono repo
- **phone-store** (store.frontend.nextdev.in): Developed a Next.js store front with no backend server to fetch ∼1000 items from a PostgreSQL database to display on a single page
- Used maps and modified binary search for search filters (∼3.6x faster than linear approach)
- Wrote a Flask application to procedurally generate/write data to the Amazon RDS database, using Google PaLM (LLM) to generate descriptions
- **sql-editor** (sql.frontend.nextdev.in): Built a responsive, backendless SQL Editor with Next.js running SQLite in the browser using WebAssembly

WebEnv | webenv.nextdev.in | *React Native, JavaScript, C/C++* May 2022 – Jan 2023

- Developed a full-stack cross platform application with a React Native frontend for an IoT device monitoring environment data and serving it over a REST API
- Used an ESP32 IoT device to monitor the data and host it on an HTTP webserver (on the device itself)
- Fetched and visualized the data with a React Native app (available online as a web demo)
- Used Cloudflare to route the IoT server to a backend domain

ESPWeb | espdev.cloud | *C/C++, JavaScript, HTML, CSS* Feb 2023 – Aug 2023

- Hosted an entire responsive website on a NodeMCU microcontroller board with just 4MB of flash and 128KB of RAM
- Wrote the website using standard JavaScript/HTML/CSS and rendered some basic server information (uptime, memory, etc.)
- Wrote the backend HTTP webserver in standard C to run in the memory-constrained environment
- Exposed the server information as a JSON API endpoint and received it using axios
- Added Google Analytics to observe real time user data

Technical Skills

Languages: JavaScript, TypeScript, SQL, Python, HTML/CSS, C, Java
Frameworks: React, Next.js, React Native, Tailwind CSS, Spring Boot, Gatsby
Tools/Technologies: Git, PostgreSQL, Linux, Arduino (AVR), Generative AI

Education

Maulana Abul Kalam Azad University of Technology West Bengal, India
Bachelor of Technology in Electronics and Communication Engineering *Aug. 2019 – Jul 2023*

International School Bihar, India
12th Board (Central Board of Secondary Education) *Apr 2019*