Muhammad Ahsan Nadeem

Software Developer

Education

COMSATS University Islamabad

Bachelor of Science in Software Engineering

Feb. 2019 – Feb 2023 Islamabad, Pakistan

Experience

AIO App Pvt. Ltd

Mar 2025 - Present

Full Stack Engineer II

Islamabad, Pakistan

- Engineered and optimized core Inventory and Accounting modules, ensuring scalability and smooth integration across business workflows.
- Integrated AI-powered **OCR engine** into invoice submodule, transforming raw extracted data into structured, user-friendly information for seamless application display.
- Developed smart **invoice editing tool** with auto-detection and perspective cropping, streamlining invoice management and minimizing manual effort.
- Contributed to Inventory submodules including Invoices, Storage Areas, Recipes, Ingredients, and Orders, improving usability and operational efficiency.
- Worked on Accounting submodules: Chart of Accounts, Journal Entry, Reconciliation, and Sales Controller, enabling precise financial tracking and reporting.
- Collaborated with cross-functional teams to deliver production-ready features, ensuring adherence to performance, security, and business requirements.

DataQ Health Nov 2024 – Mar 2025

Software Engineer

Islamabad, Pakistan

- Collaborated with OpenNMS community to enhance "Network Monitoring Portal," leveraging Vue.js, Pinia, and Feather.js for responsive frontend development.
- Integrated OpenNMS REST API to fetch and visualize device status, performance metrics, and alerts, ensuring seamless data connectivity and user interaction.
- Participated in agile sprints with daily standups, driving iterative improvements and delivering biweekly sprint demos to stakeholders.
- Contributed to scalable architecture by optimizing state management with Pinia and ensuring code reliability through vitest unit tests.

Tekrowe Digital July 2023 – Oct 2024

Full Stack Developer

Islamabad, Pakistan

- Developed and maintained frontend applications using React.js, Vue.js, and Tailwind CSS, delivering responsive and seamless user experiences.
- Built robust backend services using Nest.js and MongoDB to create scalable API services for various applications.
- Integrated Slack, Jira, and GitHub into Perf AI, an automated performance testing platform identifying performance issues, test cases, design flaws, and privacy concerns in APIs.
- Automated issue reporting directly to Slack, Jira, and GitHub, enhancing team communication and bug tracking efficiency.

Texinity Technologies

June 2022 - Sept 2022

Full Stack Intern

Islamabad, Pakistan

- Collaborated on V-Football project, building frontend with React.js and Ant Design for responsive user interface.
- Implemented backend services using Express and MongoDB for data management and seamless front-end server interaction.
- Gained hands-on experience in web scraping using Python and Selenium for automated data extraction from dynamic websites.

Technical Skills

Frontend: Vue.js, React.js, Tailwind CSS, FeatherDS (Vue Component Library), HTML, SCSS, Material UI

Backend: Nest.is, Express, Flask, MongoDB, PostgreSQL

Languages: JavaScript, Python, Java Testing & Tools: Vitest, Jest, Git, GitHub

State Management: Pinia, Redux Thunk, Zustand

AIO App - Inventory & Accounting Module | React.js, Nest.js, Postqres SQL, Material UI

Mar 2025

- Designed and developed Inventory and Accounting modules for AIO App, focusing on automation, scalability, and business process efficiency.
- Integrated the AI team's OCR engine into the invoice submodule, converting raw OCR output into structured and meaningful data for invoices.
- Created a smart **invoice editing tool** with auto-detection and perspective cropping, enhancing accuracy in invoice digitization.
- Built and maintained critical submodules: Invoices, Storage Areas, Recipes, Ingredients, Orders, Chart of Accounts, Journal Entry, Reconciliation, and Sales Controller.
- Delivered end-to-end solutions that reduced manual workload, increased data reliability, and improved financial record-keeping for clients.

Open Network Monitoring System | VueJS, FeatherDS, Pinia, Vitest, OpenNMS API

Dec 2024

- Designed and developed a custom web portal for network monitoring, integrating with OpenNMS's REST API to fetch real-time data on device status, performance metrics, and alerts.
- Utilized vue.js for the frontend and feather.js (a Nanthealth vue.js component library) for UI components to create a user-friendly interface.
- Implemented Pinia as a state management library to efficiently handle application state, ensuring seamless data flow between components.
- Implemented features for network topology visualization, device health monitoring, and historical data analysis.
- Wrote unit tests using vitest to ensure the reliability of the application.
- Gained a comprehensive understanding of OpenNMS's network monitoring capabilities and API integration, including how networks are monitored through Meridian.

Crypto Dashboard | ReactJS, Tailwind CSS, Zustand

Nov 2024

- Developed a real-time cryptocurrency tracking dashboard (https://dashboard-iota-six-40.vercel.app/) using React.js, integrating with the CoinGecko API to fetch live price data and market trends.
- Designed a responsive UI with Tailwind CSS and managed state with Zustand for efficient handling of user preferences and data updates.
- Enabled users to track prices, market capitalization, and watchlists with interactive components for an engaging experience.

Perf AI | Vue.js, Nest.js, MongoDB, Google Cloud, Tailwind CSS

Sept 2023

- Developed an automated performance testing platform for APIs, using an open spec file to identify design flaws, security vulnerabilities, performance issues, and test cases through AI modules like Design AI, Privacy AI, Performance AI, and Test AI
- Built and integrated frontend UI in Vue.js, and implemented API gateways such as Apigee, AWS, Mulesoft, and Kong to enhance flexibility for API management.
- Developed backend and frontend for integrations with Slack, Jira, and GitHub, enabling issues to be automatically
 posted to these platforms based on the identified flaws.
- Designed and integrated services with multiple API gateways, enabling automated performance testing through various platforms like Apigee, AWS, Mulesoft, and Kong for seamless API performance management.

Apla | React.is, Tailwind CSS, Redux Thunk, Nest.is, PostgreSQL

July 2023

- Developed the frontend of Apl'a using React.js and Tailwind CSS, improving the UI/UX of the platform.
- Integrated various APIs into the application to streamline functionality and enhance user interaction.
- Implemented Redux Thunk middleware to manage asynchronous logic and state within the project efficiently.

Tube Lecture Buddy | React.js, Flask, MongoDB

Feb 2023

- Developed a system to help users better understand YouTube lecture videos by analyzing and processing content through React.js, Flask (Python), and MongoDB.
- Implemented a feature to detect whether the provided YouTube link corresponds to a lecture and, if so, generated key topics discussed in the video with accurate timestamps.
- Automatically generated organized PPTs and documents containing the audio transcript and detailed lecture content, providing a structured overview of the video.
- Included functionality for translating the audio transcript into seven languages, broadening accessibility to non-native speakers.
- Developed an interest-based search feature and a video clipping tool that allowed users to extract specific video segments based on custom start and end times.