Mohammad Shahid Beigh

Srinagar, Jammu and Kashmir

<u>Email</u> in <u>LinkedIn</u> ☐ <u>Github</u>

Technical Skills

Frontend: HTML, CSS3, Tailwind, JavaScript, Typescript, Bootstrap, SASS, React, Redux, Redux Toolkit, Next.js, React Query, RTK Query

Testing: Unit testing, Integration testing, Jest, Enzyme, Mocha, Chai, React Testing Library, Cypress

Tools: Vite, Linting, JavaScript typing, Prettier

Areas of Interest: Full Stack Development, Docker, Kubernetes, Github Actions, Terraform, CI/CD, AWS, Cloud Computing, IaaS, Serverless, Database Design, System Design, Design Patterns, Architectural patterns, DBMS, Go Lang, Linux, SOLID Design Principles

Other Skills: Python, Data structures, OOP, Test Driven Development, Geolocation, OpenAI API, Git, Vercel, Netlify, Machine Learning, Fine tuning, RAG LLM Optimization, Googling, Prompt Engineering

Experience

Web Developer · Freelance Project for Owais Yaqoob

February 2024 - June 2024

Remote

- Led the full-stack development of a dynamic portfolio website using Next.js, Tailwind CSS, and TypeScript, enhancing online presence and user engagement.
- Engineered a responsive and aesthetically pleasing front-end, emphasizing usability and modern design principles that significantly improved user interaction and satisfaction.
- Collaborated closely with the client to define website requirements, ensuring the final product aligned perfectly with personal branding and professional goals.
- Implemented and integrated Email.js for contact form functionality, providing seamless user communication capabilities without backend server dependency.

ThinkNEXT Technologies Private Limited · Apprenticeship

July 2022 - August 2022

Chandigarh, India

- Developed a predictive model using advanced machine learning algorithms to estimate automobile prices based on multiple factors such as engine size, brand, model year, mileage, and condition.
- Trained and fine-tuned a Linear Regression model utilizing sci-kit-learn, achieving a nuanced understanding of how different vehicle attributes impact their market price.
- Analyzed model performance through rigorous testing, using metrics like Root Mean Squared Error (RMSE) and Mean Absolute Error (MAE), to ensure accuracy and reliability.
- Initiated enhancements for model scalability, proposing additional features and algorithms to increase predictive power and adaptability for real-world application, setting a roadmap for future improvements.

Projects

Owais Yaqoob | Next.js, Tailwind CSS, TypeScript, Email.js | GitHub | Live Demo

- Led the end-to-end development of a full portfolio website for a client using Next. js, Tailwind CSS, and TypeScript.
- Enhanced frontend design and user experience, resulting in a more engaging interface and improved usability.
- Collaborated closely with the client to understand requirements, ensuring the final product aligned with their vision.
- Demonstrated proficiency in modern web development technologies, delivering a high-quality, responsive website tailored to the client's specifications.

Campus360 | React, TypeSrcipt, Tailwind Css, OpenAI Embeddings, Langchain.js, RAG, Supabase, Firebase | GitHub | Live Demo

- An AI-powered chatbot designed to assist students, faculty, and visitors at the Model Institute of Engineering Technology (MIET).
- Initiated the project by collecting institutional data from the <u>official MIET website</u>, uploading it to the Supabase Vector Database using *Langchain.js*, which laid a solid groundwork for enhanced data-driven functionalities.
- Developed the user interface with *React, TypeScript, and Tailwind Css*, integrated with *Langchain.js*, to create dynamic response chains and intelligent dialogue templates, significantly improving user interactions.
- Enhanced backend logic using the *ChatGPT OpenAI API* and *OpenAI Embeddings*, augmented with *Retrieval-Augmented Generation (RAG)* techniques, to provide advanced natural language processing and generate contextually accurate responses.
- Optimized response generation and language modeling using RAG (Retrieval Augmented Generation), Prompt Engineering and with Langchain.js

• Operationalized *Firebase Real Time Database* to log conversations in real-time, facilitating the ongoing optimization of chatbot responses and maintaining detailed records of user interactions for continuous performance improvement and user engagement analysis.

Mohammadshahid.me | Next.js, Tailwind CSS, TypeScript | GitHub | Live Demo

- Utilized cutting-edge technologies such as Next.js, Tailwind CSS, and TypeScript to develop a sleek and modern portfolio website.
- Employed *TypeScript* for type safety and code integrity, reducing bugs and enhancing maintainability throughout the development process.
- Leveraged *Tailwind CSS* utility classes to create a highly responsive and mobile-friendly layout, optimizing the portfolio for various screen sizes and devices.
- Incorporated interactive features such as smooth scrolling, parallax effects, and lazy loading to create an immersive and memorable user experience.

Text-Wizard | React.js, React Hooks, React Router, React-Toastify, Bootstrap | GitHub | Live Demo

- Developed "Text-Wizard," a Text Manipulation App that provides tools to enhance text quickly and efficiently.
- Implemented features like word count, character count, and space removal using *React.js* and *React Hooks*, enabling swift text enhancement for users.
- Designed to serve a diverse audience, including students, writers, and business professionals, making it an essential tool for crafting high-quality written content.

Mietbot | Python, Fine Tuning, HMTL5, CSS3, JavaScript, Firebase Jupyter Notebook | GitHub | Live Demo

- Created a virtual assistant specifically for the Model Institute of Engineering and Technology (MIET), leveraging fine-tuning techniques with OpenAI's GPT-4 model.
- Leveraged a robust tech stack including *Python*, *HTML5*, *CSS3*, *JavaScript*, *Firebase* and *Jupyter Notebook*, for development and fine-tuning processes.
- Improved user interaction quality by *Fine-tuning* the language model with institution-specific data.
- Operationalized *Firebase Real-time database* Firebase Real-time database for storing user conversations and deployed using Vercel for seamless integration and scalability.

KnowItAll - ChatBot | JavaScript, OpenAI API, GPT-3.5-Turbo, Firebase | GitHub | Live Demo

- Developed "KnowItAll ChatBot," a sophisticated web application that integrates Firebase Realtime Database with OpenAI's GPT-3.5 Turbo model, offering an interactive chatbot experience.
- Engineered the chatbot to comprehend user inputs and provide human-like responses using *JavaScript* and *OpenAI API*, enhancing user engagement through dynamic conversational interactions.
- Demonstrated advanced capabilities in natural language processing by leveraging *Firebase* and *GPT-3.5-Turbo* to respond effectively to user queries, making it a valuable tool for real-time communication.

Automobiles-Price-Estimation | Python, Machine Learning, HTML, CSS, JavaScript, MySQL, Flask | GitHub

- Harnessing the power of *Machine Learning algorithms*, this project aims to predict the prices of automobiles based on various factors such as *engine size*, *make*, *model*, *year*, *mileage*, *condition*, *and other pertinent features*.
- By analyzing a comprehensive dataset of automobile features, including make, model, year, mileage, and condition, our
 model can provide accurate estimations of vehicle prices, empowering users to make informed decisions in the automotive
 market.

Education

Model Institute Of Engineering and Technology

Bachelor of Engineering in Electronics and Communications (CGPA of 7.5)

Dec~2020-July~2024

Kot Bhawal, Jammu, J&k

Research Papers

• ResearchGate

Campus360 - AI-BASED CHATBOT FOR EDUCATIONAL INSTITUTES

Language Skills / Interests

Interests

Music, Cricket, Software, Philosophy, Poetry, Travelling

Languages

Fluent English, Hindi, Urdu and Kashmiri