Syed Hamza Asif

https://syedhamzasiff.vercel.app

Email : syedhamzasiff@gmail.com
Mobile : +92-307-2776695
linkedin.com/syedhamzasiff | github.com/syedhamzasiff

Education

Institute of Business Administration — Karachi, Pakistan
Bachelor of Science in Computer Science — *Aug. 2022 – Present*

Cedar College — Karachi, Pakistan
A'Levels — *Aug. 2020 – May 2022*

Beaconhouse School System — Karachi, Pakistan
O'Levels — *Aug. 2017 – May 2020*

Projects

IncogMemos | *React, Next.js, MongoDB, TypeScript, Tailwind CSS, NextAuth, Resend* — code | demo

- Developed an anonymous messaging platform with robust user authentication, personalized dashboards, and AI-driven message suggestions, promoting secure and intuitive communication experiences.
- Designed and deployed a user-friendly dashboard interface utilizing ReactJS, allowing users to access personalized features, including unique sharable links for receiving anonymous messages, enhancing user engagement and interaction.
- Developed and implemented a secure user authentication system using Next.js and NextAuth, ensuring data privacy and user authentication integrity through email verification and unique user-generated links.

Personal Portfolio Website | *React, Next,js, Typescript, Tailwind CSS, Resend, Shadcn-ui* — code | demo

- Implemented smooth scrolling using React and Next.js, enhancing user experience. Employed Framer Motion library for seamless page transitions.
- Designed a responsive contact form with input validation. Integrated backend functionality for asynchronous email sending, improving user engagement and communication.
- Enhanced page load performance by lazy-loading components and images. Utilized Next.js features for pre-rendering pages, resulting in faster initial load times.

NQueenzAI | *Python (Flask), HTML/CSS, JavaScript (Canvas)* — code | demo

- Implemented N-Queens problem-solving algorithms (Backtracking, Genetic Algorithm, Simulated Annealing, Hill Climbing) to efficiently solve the problem.
- Created an interactive UI with HTML, CSS, and JavaScript (Canvas) for dynamic board size adjustment and algorithm selection, providing real-time solution feedback.
- Utilized Python Flask for backend logic. Flask endpoints execute solving algorithms and deliver solutions to the frontend in JSON format.

TSP-GA | *Java* — code | demo

- Applied a genetic algorithm to efficiently solve the Traveling Salesman Problem, optimizing path finding among data points and showcasing proficiency in algorithmic optimization.
- Developed a Java Swing application offering users the flexibility to generate data dynamically or import from files, expanding data input options for enhanced versatility.
- Crafted an intuitive user interface with real-time updates and visual feedback, prioritizing user experience and facilitating seamless interaction with the application.

Technical Skills

Languages: Java, Python, JavaScript, TypeScript, HTML/CSS
Frameworks: React, Node.js, Next.js, Redux Toolkit, Flask, JUnit, Tailwind CSS, Flutter, Material-UI, Shadcn-UI
Developer Tools: Git, Github, VS Code, PyCharm, IntelliJ, Vercel