Manik

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ABOUT ME

I am a highly skilled and motivated Software Developer with proficiency in building responsive and scalable web applications.

I am a quick learner, always eager to stay updated with the latest technologies and industry trends. My ability to adapt to new technologies and frameworks allows me to tackle new challenges with confidence and efficiency. I value effective communication, cooperation, and teamwork to achieve shared goals.

SKILLS

Frontend Development

- TypeScript
- JavaScript
- React.js
- Redux Toolkit
- Next.js
- HTML
- CSS
- Tailwind CSS

Backend Development

- Node.js
- Express.js
- MongoDB
- SQL
- Python

PORTFOLIO

https://manikdevbhagat.github.io

EDUCATION

Bachelor of Technology | IIT-Bombay (Jul'16 – Jul'20)

- Completed B.Tech. in Mechanical Engineering with a CGPA of 7.2
- Awarded **Institute Technical Freshmen of the Year** out of around 900 students.

WORK EXPERIENCE

Founding Frontend Developer |Elzo AI (Dec'23 – Present)

- Engineered Elzo's front-end architecture using **React.js, Tailwind CSS, and Redux Toolkit**, delivering a high-performance and scalable web application.
- Collaborated closely with the **UI/UX designer** to translate complex **Figma designs** into a **responsive**, **user-friendly interface**, ensuring a seamless user experience.
- Implemented **JSON Web Token (JWT)** for **secure authentication** and authorization.
- Created an **iframe embedding feature**, allowing the application to be embedded as a **popup** across various platforms with minimal integration effort.
- Integrated **Mixpanel analytics** to capture and analyze **user interaction data**, providing actionable insights to drive **data-informed decisions**.
- Developed and deployed a **Discord bot** to manage and run campaigns, extending the application's capabilities and **user interaction** within the **Discord ecosystem**.
- Utilized **Git** for **version control**, ensuring code integrity and efficient collaboration.

Risk Analyst |RELSAFE PRA Consulting (*Leibstadt NPP, Switzerland)* (Jul'20 – Apr'23)

- Conducted quantitative screening analysis to identify critical compartments.
- Developed Fire&Flooding PRA Model with necessary adaptations for internal events.
- Created a real-time flood propagation tool using Excel VBA, **significantly reducing flood consequence analysis time by 80%**.
- Led the development of data visualization tools using **React, JS, HTML and CSS.**

Research & Development Intern | StrautX Technologies (May'19 – Jul'19)

- Implemented **Model Predictive Control (MPC)** to regulate air output temperature in a distributed solar collector field.
- Utilized Recursive Least Squares Algorithm to estimate plant operation parameters.
- Conducted extensive simulations using OpenModelica System Software.

PROJECTS

Healthi-Verse | Web Development Project, (Oct'23)

- Developed a comprehensive platform that seamlessly connects users with gyms, personal trainers, and dieticians, streamlining the process of booking and hiring.
- Leveraged the power of **MERN stack** to create a robust and efficient application.
- Implemented a secure user authentication system using **JSON Web Tokens (JWT)**.
- Employed **Redux Toolkit** for efficient state management within React.
- Integrated the **socket.io** library to enable real-time chat functionality, allowing users to communicate with personal trainers and dieticians directly through the platform.
- Utilized **Tailwind CSS** to create a visually appealing and consistent design.

Mahindra RISE Driverless Car Challenge, (Jun'18 – Jan'19)

- Part of a 20-member team, creating India's first driverless car with level 5 autonomy.
- One of the **top 11 finalists out of 259 teams**, receiving a Mahindra e2O car.
- Utilized LiDAR and IMU data from the vehicle to create precise environment maps.
- Developed the navigation system, harnessing the power of the **Google Maps API** to successfully obtain GPS waypoints and guide the vehicle to its intended destinations.

ACHIEVEMENTS

Winners – ASME SDC World Finals, USA (Nov'17)

- Achieved **International Rank 1** at ASME-SDC 2017 World Finals, Tampa, USA.
- Collaborated in a 10-member team to construct a versatile bot capable of executing 5 distinct tasks for the competition.
- Led the design and fabrication of the award-winning 'Sprint Mechanism'.
- Implemented **PID Algorithms** on an IMU sensor for precise control.
- Significantly reduced task completion time from **35 seconds to 7 seconds**.