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

- **Languages:** TypeScript, JavaScript
- **Frameworks/Libraries:** React.js, Next.js, Redux Toolkit
- **Styling:** HTML, CSS, Tailwind CSS
- **Build Tools:** Vite, Turbo Repo

Backend Development

- **Languages:** Node.js, Python
- **Frameworks/Libraries:** Express.js, Socket.io
- **Databases:** MongoDB, PostgreSQL

PORTFOLIO

https://manikdevbhagat.github.io

EDUCATION

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

- Awarded **Institute Technical Freshmen of the Year** out of around 900 students.

WORK EXPERIENCE

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

- Architected high-performance web app using **React.js, Tailwind CSS, and Redux.**
- Transformed complex **Figma** designs into responsive, user-friendly interface.
- Implemented secure **authentication and authorization** system using **JWT.**
- Developed **iframe embedding** feature for seamless cross-platform integration.
- Integrated **Mixpanel analytics** to capture and analyze user interaction data.
- Integrated **Stripe payment gateway**, enabling subscription management.
- Utilized **Git** for efficient version control and team collaboration.
- Created and deployed **Discord bot** for campaign management and community growth.

Risk Analyst |RELSAFE PRA Consulting (Jul'20 – May'23)

Internal Fire & Flooding Analysis for Leibstadt Nuclear Power Plant, Switzerland:

- Developed a **real-time flood propagation tool** using **Visual Basic for Application (VBA)**, optimizing analysis efficiency by 80%.
- Engineered data visualization tools using **React.js, TypeScript, HTML and CSS.**
- Implemented **quantitative screening algorithms** to identify critical areas.

Aircraft Crash Analysis for Leibstadt Nuclear Power Plant (KKL), Switzerland:

- Created **data processing scripts** to analyze flight patterns and estimate crash frequencies near sensitive locations.
- Developed a **statistical model** using **Python** to calculate probabilities of non-exceedance for aircraft projectile velocities.

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

- Implemented **Model Predictive Control** in Python for solar collector systems.
- Developed parameter estimation module using Recursive Least Squares Algorithm.
- Built data visualization tools using **Matplotlib** and **Seaborn** for result analysis.

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.

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**.

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**.