Suraj Kumar

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EDUCATION

Bachelor of Technology in Electrical Engineering   **2020-24**
Indian Institute of Technology, Roorkee

Intermediate   **2018-19**
Jawahar Navodaya Vidyalaya, Udham Singh Nagar

TECHNICAL SKILLS

- **Programming:** C++, JavaScript, TypeScript, OOPs, DSA.
- **Web Development:** ReactJS, NodeJS, ExpressJS, MongoDB, HTML, CSS, Bootstrap, RestAPI, Twilio.
- **Tools:** BlandAI, VAPI, SEO.

WORK EXPERIENCE

Software Engineer, Better Software   **July 2024 - Present**
- Responsible for developing new websites, adding features to existing sites, and optimizing **SEO**.
- Worked on multiple projects across the company, primarily focusing on "**Sunlead**," an AI-powered solar quotation tool estimating costs and savings for solar installations in US residential houses.
- Utilized **VAPI** and **BlandAI** in projects to streamline user interactions and enhance functionality through AI-driven solutions.
- **Tech stack** - ReactJS, MongoDB, ExpressJS, NodeJS, TypeScript, JavaScript, tsx, jsx, BlandAI, VAPI.

ReactJS Developer Intern, Diftree Realty Pvt. Ltd.   **Feb 2023 - April 2023**
- Built responsive webpages for a real estate startup using HTML5, JavaScript, ReactJS, and CSS.
- Fetched details from backend API and rendered on the UI using React, Redux, and JavaScript libraries.
- Developed visually attractive homepage and property detail page using carousels, cards, and react hooks.
- **Tech stack** - ReactJS, NodeJS, JSX, and CSS.

PROJECTS

Sunlead, Better Software   **Aug 2024- Present**
- Built a feature to visualize rooftop solar panels using the Google Solar API and react-leaflet, rendering accurate panel layouts with the Polygon component. Improved the accuracy of quotation tool using google solar API.
- Integrated VAPI, an AI assistant, into the frontend to facilitate user interaction and data collection. Designed and implemented RESTful CRUD APIs to enable seamless communication between the AI assistant and the backend server.
- Enabled VAPI to guide users through proposal reviews and appointment scheduling. Integrated Twilio for automated SMS notifications. Wrote automated test cases to ensure reliable API functionality

Development of experiments in Virtual Lab, IIT Roorkee   **Sep 2023 - April 2024**
- Developed virtual electrical instrumentation experiments for a B.Tech project using ReactJS, Syncfusion for circuit drawing and ChartJS, d3 for data visualization.

ANN based Predictive Model for Bevel-Tip Needle Deflection, IIT Roorkee   **Aug 2022- Dec 2022**
- Developed a neural network model to predict the deflection of a needle during its insertion into liver tissue.
- Utilized MLP modeling to enhance the accuracy of the ANN model.
- Reduced the error rate to 3%, compared to 13% reported in existing research.

EXTRA CURRICULAR

- **Competitive Programming:** Pupil on codeforces(1239) and solved 400+ problems across various coding platforms like gfg, leetcode.
- **NSS IITR**: Lead a team of 50+ students and organized various events like Blood Donation Camp, Road Safety Month and many more.
- **Publication:** Published research paper focused on forecasting the deflection of a brachytherapy needle with an asymmetric tip during insertion into phantom tissue, utilizing a neural network-based approach. Link