



KARTIK KHANNA | 20ME10109

MECHANICAL ENGG.(B.Tech 4Y)



EDUCATION

| Year | Degree/Exam | Institute | CGPA/Marks |
|------|---------------|-------------------------------------|------------|
| 2024 | B.TECH | IIT Kharagpur | 8.83 / 10 |
| 2020 | AISSCE (CBSE) | Dayawati Modi Academy, Rampur | 96.4% |
| 2018 | AISSCE (CBSE) | Shirdi Sai Public School, Moardabad | 96.8% |

INTERNSHIPS

DSTRCT Media BV | Netherlands | Role: Software Engineer Lead Intern

Mar '23 - Present

- Developed a React native app, using technologies like react-native-gifted-chat, **dialogflow** for chatbots, alongside cloud databases and real-time updates
- Led a team of interns, supervising code quality and fostering a cooperative environment and made decisions on database schema and project architecture
- Proposed and integrated **HL7** FHIR APIs with high-level security features for access to **EHR**'s like EPIC/CERNER, ensuring data integrity and authenticity
- Leveraged technologies such as Node.js, Redux, Firebase and MySQL for backend, delivering cross-platform applications with advanced state management
- Developed apps,featuring attendance tracker,event-calendars etc utilizing MySQL/NoSQL,**Calendly** API and advanced features for employee management

Fettle | Role: Full Stack Developer Intern

May '23 - Jun '23

- Elevated app performance with tech integrations like Native Track-Player, **Redis** server and enabled precise user activity tracking through analytics APIs
- Implemented a **notification token** system for users and resolved bugs and integrated various packages/tools like Google Fit, Image-Picker and **Mixpanel**
- Optimized the admin panel website by addressing timeout issues through data fetching techniques and resolved backend APIs for enhanced efficiency

Zeed | Role: Backend Developer Intern

Feb '23 - Apr '23

- Pioneered a comprehensive admin panel with critical data metrics like user value and integrated third-party API like **Metals API** for real-time updates
- Engineered an efficient database **backend schema** using NoSQL database, guaranteeing effective storage and retrieval of data for seamless operations
- Architected resilient and scalable APIs utilizing Node.js, Firebase, and Express.js, fostering seamless interaction between the frontend and backend parts

Random Publications LLP | Role: Software Engineer Intern

May '22 - Jul '22

- Employing ReactJS, **TurnJS** and ViteJS, a cutting-edge e-commerce platform was meticulously crafted, enhanced with Tailwind for a visually captivating UI
- Built a custom backend API using MERN Stack, enabling user authentication, and implementing real-time order tracking system for a smooth experience
- Implemented performance optimizations, including code splitting, lazy loading, and caching, ensuring rapid loading times and enhancing the overall UI

Cling Multi-Solutions | Role: Software Developer Intern

Dec '21 - Feb '22

- Optimised the website performance and increased its efficiency by **18** percent by adopting **search engine optimization** and improving the interface
- Executed a dynamic interactive gallery from scratch based upon PHP, MySQL, HTML, Bootstrap for a online-gaming website with daily **1000+** user traffic
- Created mobile responsive full stack project with PHP, RESTful API server to handle **CRUD** operations in MySQL based database schema of user portfolio

PROJECTS

Levitree | San-Fransisco - US | Freelance Contract Project

- Developed an admin controller website with ReactJS, **ViteJS**, and Bootstrap for real-time device control, using toggles, sliders, and textboxes for feedback
- Integrated AWS **Lambda** and AWS **S3** for fetching device data and created Python APIs for IoT device data display, ensuring a dynamic user experience
- Utilized advanced **graphing** for dynamic device parameter visualization and showcased full-stack development, cloud integration, and data visualization

Memories App | Self Project

- Developed a interactive social media **MERN application** called "Memories" that allows users to post/view interesting events that happened in the lives
- Executed a full-stack MERN project using ReactJS, **Threejs**, NodeJS, ExpressJS & MongoDB to handle all **CRUD** operations and improvise user experience
- Learnt and used **axios** for making API requests, libraries such as redux/**redux thunk** for states and frameworks like **moment.js** for date/time objects

Voice-Controlled Car | Course Project

- Engineered a voice-controlled car, using Arduino,**HC-05** module with a React-Native app and enabled real-time control via **Proteus**-scripted commands
- Developed a mobile app for vehicle control, utilizing **react-native-ble-manager** for Bluetooth communication and **react-native-voice** for voice commands

SKILLS AND EXPERTISE

- Languages and Databases: C++, Python, PHP, Javascript, MongoDB, MySQL, NodeJS, ExpressJs, AWS, Firebase, Cloud Firestore, Rest-API, Numpy, Pandas
- Frameworks and Softwares: ReactJS, React Native, NextJs, ViteJs, Mixpanel, Tailwind, Dialogflow CX, Postman, HL7, FHIR, Github, Lighthouse, Bitbucket

COMPETITION/CONFERENCE

- Attained the **7th** rank among over 5000 Class-X students in Moradabad district during the Mega Minds Scholars Den competition in 2017-2018 batch
- Ranked in the top **5%** of students, I was selected for **Amazon's ML Summer School 2023**, advancing expertise in various ML and data science concepts
- Demonstrated excellence in competitive programming by attaining **11th** global rank out of 14,293 participants in the Codechef Starters 68 contest

AWARDS AND ACHIEVEMENTS

- Achieved recognition in top **5%** out of 1,800 students, earning the opportunity for a department change based on academics during the freshman year

CERTIFICATIONS

ALGORITHM AND DATA STRUCTURE | Algozenith

- Learnt and built understanding of several topics like Standard Template Library (STL), space and time complexity,combinatorial mathematics, binary-search, bit manipulation, backtracking, sorting and some advaced topics like dynamic programing,object-oriented programing, graphs, binary tree, trie

COURSEWORK INFORMATION

Programming & Data Structures | Programming & Data Structures Laboratory | Linear Algebra | Operation Research-1 | Basic Electronics | Basic Electronics Laboratory | Mechatronics Lab | Introduction to Financial Management | Introduction to Innovation And Entrepreneurship | DIY | Probability & Stats

POSITIONS OF RESPONSIBILITY

Tech Team Subhead | Spring Fest, IIT Kharagpur

Aug '21 - Mar '22

- Collaboratively developed two complete MERN stack websites within the web-team, resulting in the registration of over 3500 students for diverse events
- Coordinated the creation of an engaging web-based puzzle game, Labyrinth within a 10-member team, leading to participation from over 2000 students
- Effectively oversaw a variety of events, including arts, music, dance, during Spring Fest, significantly increasing student registrations across India by 10%