SUNNY KUMAR | 19ME31028

MECH.ENGG. MANUF.SCIENCE & ENGG. (M.Tech Dual 5Y)
MICRO SPL. in ENTREPRENEURSHIP AND INNOVATION

SUNNY KUMAR
08-02-2019

EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2024	M.TECH Dual Degree 5Y	IIT Kharagpur	7.94 / 10
2018	CBSE Board	Shiksha Bharati Sec School Khatima	86.4%
2016	CBSE Board	Shiksha Bharati Sec School Khatima	9.8 / 10

PROJECTS

E-commerce Site | Group (2) Project [May 2023]
- Built a fully functional **MERN E-commerce** webite, similar to other e-commerce sites like Amazon, Ajio and Flipkart, in which users can **filter** according to brands and types of products and ratings, Pagination is also implemented.
- Featured with login and registration authentication, functional reset password option with email link, add and delete cart functionality, email invoice, cash on delivery and online payment options, add address functionality.
- **Admin Panel** capable of add and update ordered product statuses, like payment successful, dispatched, delivered.
- Languages/Modules/Frameworks used: **MERN | Redux toolkit | Stripe Payment | Nodemailer**

Rubik's Cube Solver - using Korf's IDA* Algorithm | Algozenith Guided Project [July 2023]
- Modeled a virtual **Rubik's Cube** (3x3) in 3 different models/classes **using standard data-structures** present in C++.
- Achieved a solving time of 3 seconds for a Rubik's Cube scrambled 8 times, using **BFS, DFS and IDDFS** algorithms
- Implemented **Korf's IDA* Algorithm**, achieving a solving time of 10 seconds for a Rubik's Cube scrambled 13 times.

Movieflix | Self Project [June 2023]
- Built a fully responsive movie site, It fetches data from **TMDB api**, User can search movie to see ratings and trailers.
- Featured with trending, popular and top rated sections and filtration by days, weeks, genres and popularity.
- Library/Framework/RapidAPI Used: **React.js | Redux toolkit | TMDB API.**

Codeflix | Self Project [June 2022]
- Built a **real-time code editor** where multiple peoples can code on a single coding platform by creating a room.
- User can join using id. Any changes made by anyone on code editor will be visible to all members in real-time.
- Library/Framework/RapidAPI Used: **React.js | Node.js | uuid | express.js | socket.io | react-hot-toast.**

Vyaamsaala | Self Project [July 2022]
- Built a gym exercise website where users can search for more than a thousand exercises with animated images.
- User can also filter exercises for different categories. API used to show related exercises and videos from YouTube.
- Library/Framework/RapidAPI Used: **React.js | MaterialUI| ExerciseDB API | YouTube search and download API.**

Portfolio | Self Project [Jan 2022]
- Designed a responsive portfolio that contain all my relevant information about my projects and contact details.
- Library/Languages Used: **HTML | CSS | JavaScript | jQuery**
- **Portfolio Link:** *https://portfolio-dusky-eight-60.vercel.app/*

SKILLS AND EXPERTISE

Programming Languages : C | C++ | HTML | CSS | JavaScript | Python   **Github:** *https://github.com/Sk09032*
Framework and Librarie: Node.js | React.js | Bootstrap | Material UI | Express.js | Mongoose | MongoDB | Socket.io
Software Tools / Packages: GIT | Windows | Linux | Microsoft Office | VSCode | Android Studio | Tableau(not fluent)

COURSEWORK INFORMATION

Relevant Academic Courses: Programming and Data Structure | Transform Calculus | Partial Differential Equation | Engineering Drawing and Computer Graphics | Electrical Technology | Basic Electronics | Linear Algebra.
Online Coursework: The Complete 2020 Web Development Bootcamp (Dr. Angela Yu, Udemy) | Applied Data Structures and Algorithms (AlgoZenith - AZ201) | The Complete 2021 Flutter Development Bootcamp with Dart (Dr. Angela Yu, Udemy) | 100 Days of Code The Complete Python Pro Bootcamp for 2022 (Dr. Angela Yu, Udemy).

POSITIONS OF RESPONSIBILITY

Secretary Social and Cultural | Lal Bahadur Shastri Hall of Residence IIT Kharagpur [April 20- April 21]
- Elected as the Secretary from among 2000+ students, served as the delegate for LBS Hall of Residence at college platforms. Also, assisted GSec for Social and Cultural activities, contributing to the success of various events.
- Arranged social and cultural functions targeting fresher engagement during an online semester, alongside organizing multiple interactive sessions with seniors to provide guidance for freshers.

AWARDS AND ACHIEVEMENTS

- Qualified for State Level National Children's Science Congress (NCSC) Organized by the Department of Science and Technology, Government of India.
- Secured a rank among the **top 1%** of candidates out of more than 1.2 million candidates in **JEE 2019**.