



**SUJAY VIVEK | 22EE30029**  
ELECTRICAL ENGINEERING. (B.TECH+ M.TECH 5Y)



## EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2027	B.TECH ELECTRICAL ENG.(4Y)	IIT Kharagpur	8.20 / 10.00
2022	Karnataka PU (Class 12)	Base PU College, Bangalore	95.00 %
2020	ICSE (Class 10)	Sudarshan Vidya Mandir, Bangalore	97.00 %

## PROJECTS & INTERSHIPS

### Tech Subhead | Spring Fest | IIT Kharagpur [Tech: NodeJS, ReactJS, Three.js, ReactNative] (Dec' 23 - Feb' 24)

**Spring Fest and College Prom Website:** Made a full stack website for student registrations from more than **800 colleges** in India.

- Implemented SignIn, SignUp features using **Authentication**, used **QR code Tech** to optimize providing accommodation.
- Used multiple **APIs** for fetching data, and made dashboards for every User. Incorporated a **game** made using Unity as well.

**Spring Fest App:** Made a full fledged app using **ReactNative and Expo** for Android and ios users. Incorporated a map of our campus

- Improved efficiency of the app using **Metro bundlers** like lazy loading, tree shaking and used Image optimization techniques.

### Spotify Clone App | Self Project [Tech: NodeJS, ReactJS, HTML, CSS] (Nov' 23-Feb' 24)

**Clone Website:** Used **Spotify Web APIs** to fetch song and artist data. Implemented feature to play songs across multiple devices.

- Implemented Login, SignIn and SignUp using Spotify OAuth 2.0, and worked with React **Context API** and Reducer hooks.
- Improved on some features of Spotify by making a Dashboard for every user to show stats like Weekly Top Songs and Artists

### AI Image Captioning Model | Self Project [Tech: CNN, RNN, Python, Computer Vision, Keras] (Nov' 23 - Dec' 23)

**ML Model:** Created a model trained over **80,000 image data** that provides accurate captioning to any image upon user inputs.

- Improved **accuracy** of the Model using MaxPooling, Data Augmentation, Batch Normalization, and DropOut Technologies.
- Incorporated model in a Website, will launch it as a Service. Created user history page containing all the prompts of the User

### Secretary | Communiqué | Tech Team [Tech: ReactJS, NodeJS, Express, MongoDB, LLMs] (Aug' 23 - Mar' 24)

**CV Review Portal:** Integrated **LLMs** for Natural Language Processing, **CV** and chatbot responses with different frameworks.

- Made use of Node and Express, along with MongoDB for databases. Implemented Authentication using **JWT Auth** for users.
- Git for version control, and used AWS to deploy on cloud. Used **RESTful APIs** for communication with backend of website.

**GMUN Website:** Used ReactJS to make responsive website for student registrations taking part in MUN organized in the college.

- Optimized Gallery of website by implementing Lazy Loading. Deployed on Vercel, and engaged by more than 2k students.

## SKILLS AND EXPERTISE

**Programming Languages:** C++, C, Python, HTML, CSS, Javascript, Typescript, SQL, JAVA, Solidity | **Platforms:** Web, Windows  
**Frameworks:** Pandas, Numpy, Tensorflow, Keras, ReactJS, Scikit, React Native, NodeJS, Seaborn, Matplotlib, Scipy, Ethereum  
**Tools:** MongoDB, Unity Game Development, Android App Studio, Blender, Photoshop, Canva, Figma, Arduino IDE, Web3.js

## AWARDS AND ACHIEVEMENTS

- Secured an All India Rank of **1951** in **JEE Advance** Examinations 2022 out of a total of **1,55,538 candidates**. (Top 1 %)
- Secured a **99.6 percentile** all over India in the **JEE Mains** Examinations 2022 out of a total **10,00,000 students** (10 lakh)

## POSITIONS OF RESPONSIBILITY

### Secretary | Communiqué | Official Soft Skills and Personality Development Society (Nov' 22 - Present)

- Organized the **Global Model United Nations**. Structurized Databases and played a key role in the **Marketing of the event**.
- Conducted the All India Placement Aptitude Test (AIPAT) and received an impressive registration count of **1500+ students**.
- Lead the Software Team, and delivered instructions in **Web Development** to a cohort of **40+ Associates** in the society.
- Conducted **CV Review and Mock Interview** drives to assist students in their preparation for placements and internships.

### Tech Subhead | Spring Fest | Social and Cultural Fest | IIT Kharagpur

- Worked in a team of **Tech SubHeads** to create a fully functional Spring Fest Official Website and the College Prom Website.
- Created an **App** and deployed it on PlayStore containing information related to the fest for the guidance of students outside.

## COURSEWORK INFORMATION

**Academic Coursework :** Programming and Data Structures, Advanced Calculus, Electrical Technology, Linear Algebra, Transform Calculus, Signals and Systems, Analog Electronics, Digital Electronics, Probability and Statistics, Entrepreneurship and Innovation.

## EXTRA CURRICULAR ACTIVITIES

- Part of the 3 player **Squash Team** of Radhakrishnan Hall of Residence in the **General Championship** held across halls in IIT KGP.
- Made a **Remote Controlled SandRover** while competing in the SandRover Challenge organized by **Kshitij (Tech Fest at IIT KGP)**
- Took part in multiple **Open IITs** and the Technology General Championship in **Case Study** at Radhakrishnan Hall of Residence.