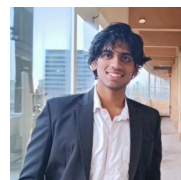


SUJAY VIVEK | 22EE30029
ELECTRICAL ENGINEERING. (B.TECH+ M.TECH 5Y)



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

Alpha Creation Algorithmic Trading | World Quant Competition [Tech: Python, Numpy, Pandas] (April' 24)

- Created multiple alphas, with neutralization strategies using historical market data. Backtested in several stock universes.
- Tried optimizing investment based on factors such as risk management expected returns and correlation among stock price.
- Improved Aggregate performance parameters to get better Returns, Sharpe Ratios and analysed PnL charts for the alpha.

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

Trading Algorithms & Quantitative Finance | Self Project [Tech: Python, NLP, RNN] (Dec'23 - May'24)

- Hard coded multiple trading indicators made multiple templates of Backtesting through PnL charts, Sharpe Ratios & Returns.
- Created algorithms for high frequency trading, made of use Deep Learning & Neural Network techniques in the models too.
- Web Scraping:** Used various tools & libraries like Selenium, Beautiful Soup to extract high volumes of unavailable data.

Governor | Communiqué | Tech Team [Tech: ReactJS, NodeJS, Express, MongoDB, LLMs] (Aug' 23 - June' 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.
- Created a Mock Interview Portal, using Computer Vision and edge computing strategies, along with audio processing review.

SKILLS AND COMPETENCIES

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 of **10,00,000 students** (10 lakh)
- Won 3rd place in **Case Study, General Championship Technology 2024** across all the halls throughout the entire campus.

POSITIONS OF RESPONSIBILITY

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

- Organized the **Global Model United Nations**. Structured 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**.
- Led the Software Team, and delivered instructions in **Web Development** to a cohort of **40+ Associates** in the society.
- Conducted **CV Reviews 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.
- Managed **8+** Cultural Events for a total of more than **200+** participants in a span of **3 days** during the time of the Fest.

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.

Professional Coursework : Machine Learning and Artificial Intelligence, Data Science, Web Development, Blockchain (Web 3) Development, Computer Vision, Natural Language Processing, Data Structures, System Designs, Android App Development.

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.
- Took part in multiple **Open IITs** and the Technology General Championship in **Case Study** at Radhakrishnan Hall of Residence.