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ROHAN SACHAN

Dual Degree, Electronics & Electrical Communication Engineering IIT Kharagpur, West Bengal, 721302

ACADEMIC PROFILE

2026	IIT Kharagpur	M.Tech Dual	7.53/10
2020	PCVN, Kanpur	Class XII (CBSE)	92.4%
2018	PCVN, Kanpur	Class X (CBSE)	91.3%

INTERNSHIPS

SparkIQ | AI Developer Sep 2024 – Oct 2024

Developed scalable AI-driven solutions for automated ad creative generation, leveraging cutting-edge image processing techniques

- Automated creation of diverse backgrounds tailored to specific prompts by utilizing multiple AI models and generative frameworks
- Built and maintained API endpoints using FastAPI, streamlining model integration into ad creation workflows for seamless operations
- Enhanced model robustness with data augmentation, including text positioning, optimized outputs using Stable Diffusion and Pillow
- Integrated Color Thief to extract dynamic color palettes, improving ad design aesthetics and driving increased user engagement.

Adyogi | Data Science Engineer

May 2024 - Jul 2024

Optimized data processing and financial forecasting for client performance, leveraging Gen AI for the title optimization and insights

- Cleaned and preprocessed over 1.5 lakh rows of client data in Google BigQuery, ensuring high-quality data and reliable analysis
- Improved the spends' prediction accuracy by 20%, isolating key factors significantly affecting demand using exploratory data analysis
- Engineered a Generative AI model combining Gemini 1.5 flash, finely tuned on a dataset using Hugging Face Transformer library
- Utilized AI to dynamically generate product titles & description, increasing CTR by 20%, and a 5% increase in client growth & sales

Pococare | Product Analyst

Jun 2023 - Jul 2023

Leveraged data-driven insights to optimize Emergency Management portal, improving user experience and increasing the efficiency

- Identified over 10 errors and bugs in the Emergency Management Portal, collaborating with the Tech team for effective eradication
- Developed and executed more than 120 test cases to ensure the robust quality and functionality of the Medical Emergency portal
- Contributed to user behavior analysis and feedback evaluation, pinpointing the critical pain points and suggesting improvements
- Collaborated with sales and business development teams to identify and onboard 3 new target companies, expanding its reach

Indian School of Business | Data Analyst

Aug 2022 - Sep 2022

Executed tasks involving web data extraction, automation, extensive data preparation, and generating insightful qualitative analysis

- Constructed web scrapers using Python libraries such as FuzzyWuzzy, Selenium and Scrapy to extract pertinent tables from websites
- Utilized **BeautifulSoup** to automate data extraction from **15+ government URLs**, ensuring seamless retrieval of desired information
- Transformed crude data of approximately 40 features and 350k+ instances using pre-processing tools for its quantitative analysis
- Analyzed NPCI payment failure data across multiple months, generating insightful reports using Pandas, Matplotlib for visualization

PROJECTS

Semantic Road Analysis - Deep Learning | Prof Bharath H Aithal, IIT Kharagpur

Jan 2024 - Apr 2024

- Developed and implemented the FCN segmentation model for road feature extraction from Ottawa Dataset with 1500 + images
- Conducted rigorous evaluation using statistical testing, employing metrics like F1 score of 0.87, IOU of 0.77, with an accuracy of 0.97
- Extracted road connectivity, centerlines and width information, employing centroid-based methods for calculating width of the road

Automated Fake News Detection using NLP | Self Project

Jun 2023

- Developed a BERT-based AI classifier to detect fake news and misinformation from online articles, achieving an accuracy of 92%
- Trained on the LIAR and FakeNewsNet datasets using advanced NLP techniques, reducing false positive rates by a significant 18%

SKILLS AND EXPERTISE

Programming Languages: Python | SQL | C++ | HTML

Software and Tools: BigQuery | MATLAB | Microsoft Office | Confluence | Tableau | Figma | Adobe Photoshop & Illustrator **Libraries:** NumPy | Pandas | Scikit-Learn | Matplotlib | Seaborn | OpenCV | BeautifulSoup | TensorFlow | NLPK | PyTorch

POSITIONS OF RESPONSIBILITY

General Secretary | Students' Alumni Cell, IIT Kharagpur

May 2022 - Jun 2023

Selected to head a 3-tier team of 60 for harnessing Institute-Alumni relations in coordination with the Dean, Director and Institute staff

- Administered 19th Annual Alumni Meet with 15+ events, accommodating 3 batches of alumni, with an attendance of 500+ guests
- Spearheading "My Imprint Class Gift Campaign" along with Institute Development Team overseeing an annual budget of INR 3.2M
- Collectively generated INR 2.6M through corporate engagement to fund the activities of the cell throughout the year, 2022 2023
- Successfully handled the events' Budgeting and Finances of Students' Alumni Cell, accounting for an overall total of INR 11.5 M

EXTRA CURRICULAR ACTIVITIES

- Was a part of gold-winning team in the CBSE Cluster IV Football Tournament, 2017 and subsequently participated in Nationals
- Worked as a student volunteer in the 67th Convocation Ceremony for 2021 batch, offering assistance to the Institute staff
- Participated and represented my school in the KSS Skating Competition organized by CBSE Kanpur Sahodaya Schools in 2013-2014