

Viraj Suresh Dalsania

✉ viraj.dalsania2003@gmail.com

☎ +49 15510833032

📍 Dresden, Germany

🌐 linkedin.com/in/virajdalsania

📞 +91 9316471288



ABOUT ME

Computer Science Master's student at Technische Universität Dresden with a focus on Data Science and AI/ML applications. Passionate about exploring emerging AI technologies, conducting analytical research, and developing innovative solutions for complex data problems.

EDUCATION AND TRAINING

Master of Science (Computer Science),

Technische Universität Dresden — TU Dresden

10/2025 – Present

Dresden, Germany

Bachelor of Technology (Information and Communication Technology),

Pandit Deendayal Energy University (PDEU), Gandhinagar

09/2021 – 05/2025

Gandhinagar, India

- Final Grade: 9.69/10 (\approx 1.1 in German grading system)

- Thesis: Implementation of a LightGBM-based Long-Short Trading Strategy for Indian Stocks

PROJECTS

Implementation of a LightGBM based Long-Short Trading Strategy for Indian Stocks

01/01/2025 –

20/05/2025

Designed and implemented a complete machine learning pipeline for a long-short trading strategy on Indian equities. This involved automated data acquisition, extensive feature engineering, and the development of predictive models using gradient boosting techniques. The system included robust hyperparameter optimization, time-series backtesting, and live implementation to validate practical performance and signal generation capabilities.

Analysing the Impact of Russia-Ukraine War on Oil Prices using NLP and Machine Learning Techniques

09/2024 – 12/2024

Developed a predictive analysis model to examine the impact of news sentiment on oil prices during geopolitical tensions. Collected and integrated news data with historical Brent oil prices, then performed sentiment analysis to extract geopolitical sentiment scores. Built and trained an LSTM model for time-series forecasting, achieving high accuracy and identifying sentiment-price correlations.

Employee Management System

05/2024 – 07/2024

Built a full-stack web application for employee management with a React.js and Redux Toolkit frontend for seamless state management. Developed a Node.js and Express.js backend and integrated MySQL for secure data storage. Implemented JWT based authentication and enhanced UI/UX, ensuring a modern and user-friendly interface.

WORK EXPERIENCE

Full Stack Web Developer (Intern), I/H Global

27/05/2024 –

07/07/2024

Ahmedabad, India

- Practiced frontend and backend development with the help of various mini projects.
- Developed an Employee Management system from scratch using React.js, redux toolkit, MySQL, Express.js and Node.js.
- Connected the system with database for real time operations on data and added security features like password encryption and user authorization.

SKILLS

Technical Skills

Programming Languages: Python, C++, JavaScript, SQL

Machine Learning & AI: Machine Learning, Deep Learning, NLP, Large Language Models (LLMs), Prompt Engineering, Fundamentals of AI

Libraries & Frameworks: NumPy, Pandas, Scikit-learn, SciPy, TensorFlow, PyTorch

Data Science & Analytics: Data Analysis, Data Visualization, Power BI, Microsoft Excel

Data Engineering & Databases: SQL, NoSQL (MongoDB), ETL Pipelines, Data Modeling

Web Development: HTML, CSS, JavaScript, React.js, Node.js, Express.js, REST API Design

Cloud & DevOps: AWS (Amazon Web Services), Git, GitHub, CI/CD

Other Tools: Microsoft Office Suite (Word, PowerPoint, Excel)

Soft Skills

- Good Communication and Writing Skills
- Problem analysis & Problem Solving
- Teamwork & collaboration
- Adaptability

LANGUAGE SKILLS

English

C1

German

B1 (Learning B2)

CERTIFICATION

- | | | |
|---|--|---|
| • Databases and SQL for Data Science with Python - IBM (Coursera) | • Python for Data Science, AI & Development - IBM (Coursera) | • Data Science Methodology - IBM (Coursera) |
| • Tools for Data Science - IBM (Coursera) | • Intern Web Developer (Summer Internship) | • Ultimate AWS Certified Cloud Practitioner CLF-C02 (Udemy) |
| • Privacy and security in online social media (NPTEL) | • HTML, CSS, and JavaScript for Web Developers — Johns Hopkins University (Coursera) | • SQL and Relational Databases 101 (IBM) |