# Tejas Lohia

Quantitative, Analytical and Curious


Indian Institute of Technology, Gandhinagar

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## Profiles

LinkedIn

Github

Portfolio Website

## Skills

### Programming Languages

C, C++, Python, SQL, Matlab, Verilog

### Python Libraries

Numpy, Matplotlib, Pandas, CV2, Tensorflow, PyTorch, Yahoofinance, Scikit-learn, Keras

### Libraries

HTML, CSS, Flask, Javascript, MongoDB

### Software Tools

Git, Docker, Jupyter Notebooks, AWS, Autodesk, Arduino, Xilinx Vivado

Second-year Computer Science and Engineering undergraduate at the prestigious Indian Institute of Technology Gandhinagar with a proven academic track record and a strong foundation in analytical problem-solving. Deeply engaged in quantitative finance, machine learning, and data science, complemented by a minor in mathematics to sharpen technical expertise. Committed to leveraging these skills for cutting-edge research and impactful innovations.

## Selected Projects

**TinyWL Window Manager for Linux in C** **Dec'24 - Present**

Advisor: Prof. Balgopal Komarath

• Developing a custom window manager, TinyWL, in C, focused on adding advanced features such as dual-window display, stacking, tiling, and window merging (snapping), to incorporate implementation of efficient window management techniques, enhancing user interaction, and contribute to the Linux Society.

**MLP based Test Generator** **Aug'24 - Nov'24**

Advisor: Prof. Nipun Batra

https://es335-24-fall-assignment-3-krusty-krabs.streamlit.app

Developed and implemented a sophisticated text generation model from the ground up using a Multi-Layer Perceptron (MLP) architecture, leveraging the rich linguistic patterns from Shakespearean text for training.

The model was deployed on a dynamic Streamlit app, allowing users to seamlessly customize parameters such as vector length and paragraph length, enabling personalized, high-quality text generation.

**Quantitative trading** **Oct'24 - Present**

https://github.com/TejasLohia21/Quant_strat

Developing cryptocurrency trading strategies focusing on Ethereum and Bitcoin, incorporating technical indicators, machine learning models, and risk management techniques using.

Currently the model integrates technical indicators, Fibonacci retracements, dymically changing neural networks based on Market regime model using GAARCH and clustering, and risk management tools like covariance analysis and VaR

**Flask based Data Visualization Tool** **Jan'24 - Apr' 24**

Advisor: Prof. Mayank Singh

https://github.com/TejasLohia21/23110335_DCC

Developed a comprehensive Electoral Bonds Data Analysis platform, converting PDF data into dynamic visualizations.

Implemented advanced search, donation insights, and interactive charts (Pie, Bar, Line) using ChartJS. Enhanced data exploration with custom visualizations and exportable plots, providing actionable insights into political donations.

## Education

**Indian Institute of Technology, Gandhinagar** — **August 2023 - Present**
Computer Science and Engineering — Bachelor of Technology
CPI: 9.29 / 10.0
https://iitgn.ac.in

**Aditya English Medium School** — **May 2021 - April 2023**
Science — Senior Secondary
94%

## Experience

**Inter IIT - 13.0** — **December - 2023**
Zelta Automation (Untrade) Team Member — IIT Bombay
https://interiit-tech.com

## Academic Profile

### Relevant Courses

Machine Learning **(9/10)**, Data Structures and Algorithms **(9/10)**, Data Centric Computing **(9/10)**, Introduction to Computing **(10/10)**, Discrete Mathematics **(9/10)**, Introduction to Complex Analysis **(10/10)**

## Achievements

Awarded **Dean's List for Academic excellence** for exceptionally well academic performance at IIT Gandhinagar.

Awarded **Academic Citation** in third Semester for Academic Excellence at IIT Gandhinagar.
Recieved **Branch change** from Electrical to CSE based on academic excellence.

**Ranked First** in both the semesters of first year in Electrical Branch.
Certified in **Machine Learning** by DeepLearning.ai | Coursera

## Position of Responsibility

**Core Member -Astronomy Club** — **Jan 2023 - Present**
IIT Gandhinagar

• Organized and conducted hackathons and deep-sky observation sessions for public, fostered collaborations with esteemed astronomical organizations such as IUCAA (Pune) and JVP Pune

• Led the team in exploring and implementing various astrophotography techniques by organizing observation sessions and interactive workshops to teach methods and best practices.

• Spearheaded the development and application of advanced algorithms including panorama stitching, noise removal, data compression, and derotational models for high-quality astrophotography.

**Core Member - Finance Club** — **June 24' - Present**

• Organized hackathons and facilitated community understanding of credit, loans, banking concepts, and budget analysis for 2024.

• Guided and collaborated with individuals in the community to explore quantitative finance and deepen their knowledge of the financial world.