



**Vanshil Gupta**  
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**9424636063**

**Master of Technology**

Gender : **MALE** DOB : **28-12-2001**

| Examination | University | Institute  | Year | CPI / % |
|-------------|------------|------------|------|---------|
| Graduation  | IIT Bombay | IIT Bombay | 2023 |         |

**Auxiliary Degree:** Pursuing a minor degree in **Industrial Engineering and Operations Research**

### PROFESSIONAL EXPERIENCE

**Business Development Associate** | *Cleaning, Urban Company (P) Ltd.* [Jun'22 – Sep'22]

*Awarded a Letter of Recommendation from Head of Cleaning Category for strong analytical skills and exemplary performance*

- Built over **150+** SQL queries by rigorously going through data and making complex connections between different tables.
- Identified trends and presented findings through visualization. Contributed to **13% M-o-M** growth in revenue for Cleaning Category
- Established automated scheduled jobs optimizing data updates, leading to an **8+** hour reduction in weekly manual efforts.
- Devised 3 interactive real-time **Dashboards** to replace Excel-based tasks, enhancing data visibility and saving **15+** hours per week.

**Data Science Intern** | *IT Aakash Strategic ERP (P) Ltd.* [Dec'20 – Jan'21]

- Worked on improving accuracy up to **90%** for predicting image class using **CNN**-based Deep Learning model via **Pytorch**.
- Applied and compared **regression algorithms** (linear, ridge, decision tree) using cross-validation in the Housing price problem.

### KEY PROJECTS

**Crime Prediction Using ML** | *Course Project, ME - 781* | Guide: Prof. Asim Tewari

[Oct'22 – Nov'22]

*Developed a crime prediction and classification system using machine learning to predict future criminal activity in Indore City.*

- Conducted extensive data analysis and visualization using Python libraries (Pandas, NumPy, and Matplotlib) to identify patterns and trends in crime data scraped from the Indore police website using **Beautiful Soup** and **Selenium**.
- Implemented and fine-tuned multiple ML algorithms, achieving **98%** classification accuracy on test data using **Random Forest**.
- Developed **Flask** web app for crime prediction with location and timestamp inputs, encompassing 6 distinct types of crimes.

**Twitter Sentiment Analysis** | *Winter in Data Science, Analytics Club, IIT Bombay*

[Dec'22 - Jan'23]

*Performed a sentiment analysis on the Twitter dataset to classify the sentiment in the tweets using machine learning algorithms.*

- Applied **text-processing techniques** to enhance data quality, including tokenization, stopwords removal, and lemmatization.
- Achieved **92%** classification accuracy by using Word Embedding techniques (**Word2Vec**, **TF-IDF**) and **LSTM** neural networks.
- Developed an interactive dashboard for the real-time sentiment analysis of tweets using StreamLit, Heroku, Dash, and Plotly.

**Real-time Object Detection** | *Seasons of Code, Web and Coding Club, IIT Bombay*

[Jun'22 - Jul'22]

*Performed image classification on the sample dataset and built an object detection model using YOLOv5*

- Pre-processed a Cats Vs. Dogs data set and deployed a CNN-based neural network using Keras, achieving **98%** accuracy.
- Analyzed the code of **YOLOv3**, an object detection model, and used a pre-trained **YOLOv5** model to perform object detection.
- Built a Web application that supports object detection in live streaming using **Flask** and facilitates saving the detected data.

**Full Stack Web Development** | *Traineeship, Autonise AI*

[May'21 - Jul'21]

*Built a feature-rich E-commerce platform using the latest frontend and backend tech stack and deployed it at the end.*

- Developed an interactive E-Com website using Angular and Ionic while managing version control on Github in a team of two.
- Configured the backend using Django while integrating MongoDB to facilitate storage and retrieval of product and user data.
- Implemented an authentication layer utilizing JWT token-based system to enhance the security and integrity of the login flow.

### EXTRACURRICULARS AND ACCOLADES

|           |   |
|-----------|---|
| ACCOLADES | <ul style="list-style-type: none"> <li>• Secured <b>99.4</b> and <b>98.15</b> percentile in JEE Mains and Adv. '19, respectively</li> <li>• <b>1st</b> in bid and build competition out of <b>100+</b> teams (<i>E-Summit'23, IITB</i>)</li> <li>• Stood <b>2nd</b> in trading competition out of <b>50+</b> teams (<i>Finance Club, IITB &amp; IMC trading</i>) '22</li> <li>• <b>2nd</b> in <i>XLR8 '19</i>, a bot making competition out of <b>100+</b> teams (<i>ERC Club, IITB</i>)</li> </ul>   |
| SPORTS    | <ul style="list-style-type: none"> <li>• Trekked Kalsubai, <b>highest peak</b> of Maharashtra</li> <li>• Part of Republic Day Parade contingent under <i>NCC, APS MHOW</i> for years '16 and '17.</li> <li>• Underwent a <b>one-year</b> training program in NSO Cricket.</li> </ul>  |
| FINANCE   | <ul style="list-style-type: none"> <li>• Option Pricing Models Project (<i>Finsearch, Finance Club, IITB</i>)</li> <li>• Zerodha Varsity Module till Fundamental Analysis</li> </ul>  |
| CULTURAL  | <ul style="list-style-type: none"> <li>• Cinematographed and acted in a Music Video, bagging <b>3<sup>rd</sup></b> position out of <b>30+</b> entries, and Cinematographed a short film, 'Namoone', which received <b>special mention</b> in the competitions conducted by <i>Silverscreen, IITB</i>.</li> </ul>  |
| TECHNICAL | <ul style="list-style-type: none"> <li>• <b>OTHER-PROJECTS: Image captioning</b> using CNN (<i>Course Proj. GNR-638, Prof. Biplob Banerjee</i>), <b>2048 Game Dev.</b> using Python (<i>Prof. Gajendranath Choudhary, IIT Hyderabad</i>), Finite element analysis (<i>Course Project</i>)</li> <li>• <b>MOOCs and Certifications:</b> <b>SQL</b> for data science, <b>Excel</b> skills for business, <b>Deep Learning</b> Specialization (<i>Coursera</i>), Python for Business Analytics (<i>Henry Harvin</i>), Virtual Software Engineering Internship (<i>Forage, JPM</i>)</li> <li>• <b>Skills:</b> Python, C++, SQL, MS Excel, MATLAB, Deep Learning, TensorFlow, Pytorch, NumPy, Pandas, Sklearn</li> </ul> |