



**Vanshil Gupta**  
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**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	• Secured <b>99.4</b> and <b>98.15</b> percentile in JEE Mains and Adv. '19, respectively • <b>1st</b> in <i>bid and build</i> competition out of <b>100+</b> teams ( <i>E-Summit'23, IITB</i> ) • Stood <b>2nd</b> in trading competition out of <b>50+</b> teams ( <i>Finance Club, IITB &amp; IMC trading</i> ) '22 • <b>2nd</b> in <i>XLR8</i> '19, a bot making competition out of <b>100+</b> teams ( <i>ERC Club, IITB</i> )
SPORTS	• Trekking Kalsubai, <b>highest peak</b> of Maharashtra • Underwent a <b>one-year</b> training program in NSO Cricket. • Part of Republic Day Parade contingent under <i>NCC, APS MHOW</i> for years '16 and '17.
FINANCE	• Option Pricing Models Project ( <i>Finsearch, Finance Club, IITB</i> ) • Zerodha Varsity Module till Fundamental Analysis
CULTURAL	• Cinematographed and acted in a Music Video, bagging <b>3rd</b> position out of <b>30+</b> entries, and Cinematographed a short film, 'Namoon', which received <b>special mention</b> in the competitions conducted by <i>Silverscreen, IITB</i> .
TECHNICAL	• <b>OTHER-PROJECTS:</b> Image captioning using CNN ( <i>Course Proj. GNR-638, Prof. Biplab Banerjee</i> ), <b>2048</b> Game Dev. using Python ( <i>Prof. Gajendranath Choudhary, IIT Hyderabad</i> ), Finite element analysis ( <i>Course Project</i> ) • <b>MOOCS and Certifications:</b> SQL 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> ) • <b>Skills:</b> Python, C++, SQL, MS Excel, MATLAB, Deep Learning, TensorFlow, Pytorch, NumPy, Pandas, Sklearn