



Himanshi Yadav
Civil Engineering
Indian Institute of Technology Bombay

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B.Tech.
Gender: Female
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Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2024	8.15

PROFESSIONAL EXPERIENCE

Simplability / Software Engineer

[June'24 - Present]

- Automated **Odoo** workflows via **Python** APIs, optimizing billing, journal entries, price tracking, and expense management
- Engineered a robust Appsmith dashboard in JavaScript, analyzing **20k+** records for actionable insights and decision-making
- Developed a Vue.js app with PocketBase, enabling seamless product image capture, data entry, real-time Odoo integration
- Mastered Odoo modules (Sales, Purchase, Accounting, Inventory) to enhance automation, efficiency, and data accuracy
- Led backend integration, automating approval flows, reducing manual work, and ensuring data integrity across systems
- Backend tech used: Python web framework Flask for developing APIs, AWS EC2 for backend deployment, Odoo APIs

Pepperfry Private Limited / Software Engineering Intern

[May'23 - Jul'23]

Awarded a **Letter of Recommendation** from the project head for the commendable hard work and fast learning ability

Work	<ul style="list-style-type: none">Converted 50k+ listed products into vector embeddings and stored in ChromaDB for semantic searchEnabled precise recommendations by integrated Computer Vision API; translate user-input image to textDeveloped Retrieval Augmented Generation model using Python, Langchain, OpenAI & VectorDBStreamlined thread communication by developing OpenAI-powered summary generator for CRM portal
Impact	<ul style="list-style-type: none">Expected 15% user engagement through RAG model to propose both similar and complementary itemsProjected to provide the personalized product suggestions in <60 sec through prompt and image inputsAutomated communication thread comprehension, reduces time/thread & markedly improving efficiencyReduced ICRM costs by over 80% by implementing prompt engineering to minimize token consumption

KEY PROJECTS

Music Recommendation System / Microsoft Engage 2022

[Apr'22 - May'22]

- Developed Music recommendation system using content-based filtering on Spotify Database from **Kaggle** & **Spotify API**
- Implemented **Cosine Similarity** & **Euclidean Distance** for song similarity, recommending popular tunes with sorting algo
- Built dynamic web application with **Flask** to showcase various features and functionalities of the recommendation system
- Demonstrated expertise in music recommendation, **data manipulation**, and **web development** for intuitive user experience

Astrotetros / Institute Technical Summer Project / Institute Technical Council

[Mar21-Jul21]

- Collaborated in a 3-member team to **enhance** the study of **astronomical objects** by improving quality of distorted images
- Leveraged Python & **OpenCV** libraries to apply image enhancement techniques, enhancing astronomical vision of images
- Designed a seamless **Django** and OpenCV pipeline, paired with an user-friendly AngularJs interface hosted on GitHub

Analysis of a Residential Structure / Course Project

[Jul'22 - Nov'22]

Guide : Prof. Meera Raghunandan, Civil Department IIT Bombay

- Implemented Structural Design principles on **G+3 model**, enhancing learning through optimized beams, columns & slabs
- Utilized **ETABS** software to analyze and validate designs, aligning with Indian Standard 456-2000 through hand calculations
- Enhanced accuracy by detecting and addressing discrepancies in **structural** elements for a comprehensive learning experience

JEEGPT / Personal AI IIT-JEE Tutor / Self Project

[Jul'23 - Aug'23]

- Built a personal **AI-tutor** for JEE aspirants, capable of chatting about syllabus, resolving doubts, and giving tips and tricks
- Utilized **ChromaDB** to store vector embeddings, **Langchain** and **OpenAI API** to develop efficient AI model using python
- Exposed AI model as **API service** using Flask framework, integrated with HTML, CSS, JavaScript and Bootstrap frontend

Predictive Analysis of Uber Prices using Machine Learning / Self Project

[May'23]

- Conducted **Exploratory Data Analysis** (EDA) on a dataset with 57 columns and approximately 6 lakh rows from Kaggle
- Employed Matplotlib & Seaborn to create various **data visualizations** such as histograms, scatter plots, correlation matrices
- Implemented various machine learning **algorithms**, including Decision Tree, Random Forest, Gradient Boosting Regressor
- Achieved **accuracy** of **96%+** on training dataset for Decision Tree, Random Forest, & Gradient Boosting Regressor models

Dashboard Analytics Project

[Dec'22]

- Created user-friendly **CSV submission** and processing using Python libraries(NumPy, Pandas) for efficient data handling
- Skilfully utilized Python libraries & frameworks to **visualize** processed data; offers clear understanding of complex information

POSITIONS OF RESPONSIBILITY

Core Team Member / Web Head / Aakaar / IIT Bombay

[Jun'22 - May'23]

Part of a **18-member core team** at **Asias largest Civil Engineering fest** | **30+ events** | **1200+ colleges** | **400+ volunteers**

Leadership	<ul style="list-style-type: none"> Spearheaded a 2-tier team of 100+ students for building and maintaining the website and various events Executed 10+ workshops, 8+ lectures, 6 competitions & panel discussion; attended by 10k+ students
Development	<ul style="list-style-type: none"> Developed 5+ full-stack websites with Django, HTML, CSS & JS; utilizing SQL for efficient data retrieval Enhanced user experience with Django Google Sign-In & interactive CR portal dashboards for 5k+ CRs Leveraged SEO best practices to enhance website visibility, boost search rankings, drive organic traffic Achieved AWS site deployed, Python-integrated AWS SES for bulk emails and automated Django mail
Reforms	<ul style="list-style-type: none"> Pioneered and launched the 1st ever accommodation portal Annually website impressions 1.5M+ hits Expanded CiviQ zonal to metro cities & launched multicity workshops increased 60% y-o-y participation

EnB Buzz Mentor | Entrepreneurship Cell | IIT Bombay

[Dec'21]

- Mentored 4 teams each comprising of **4 first year students** in EnB buzz, a case study **business model competition**
- Cultivated an **entrepreneurial mindsets** among mentees by teaching them the basics of idea pitching and presentation

Coordinator | Competitions Division | Aakaar | IIT Bombay

[Oct21 - Mar22]

Annual Fest Of Civil Engineering Department | Footfall: 15,000+ | Colleges: 400+

- Acted as the chief point of **communication** for participants, effectively ensuring their active engagement and involvement
- Supported the ideation, structuring and, execution of **nationwide** competitions to foster competition and skill development
- Aided a country-wide Competition targeting a **14k+ audience** to garner solutions for the Finite element applications
- Assisted in execution of nationwide competition on real-life **industrial design** problems on **sustainability** of concrete

SKILLS & CERTIFICATIONS

Skills	<ul style="list-style-type: none"> Languages: C++, Python, JavaScript, SQL, \LaTeX, HTML, CSS, Bootstrap, ReactJS, Git and GitHub Libraries: Numpy, Pandas, Matplotlib, LangChain, Scikit Learn / Tech Stack: Django, Flask, MERN OS: Windows / Tools: MS Excel, MS Powerpoint, Word, PowerBI, Tableau, Azure DevOps, Postman Misc.: Agile Methodology, Prompt Engineering, Data Structures and Algorithms, Teamwork
Certification	<ul style="list-style-type: none"> Certified to be one of the top 20 scorer of the MATLAB Virtual Challenge organised by PGAC, IITB Data Analysis with Python IBM • Machine Learning with Python IBM CognitiveClass.ai Web Development Bootcamp Udemy • Matlab Onramp • Optimization Onramp Mathworks

RELEVANT COURSES COMPLETED

Core	<ul style="list-style-type: none"> Structural Mechanics, Engineering Surveying, Building Materials and Construction, Engineering Mechanics, Solid Mechanics, Hydraulic Engineering, Transport Engineering, Geotechnical Engineering, Foundation Engineering, Construction Management, Water Resource Engineering and Applied Geology
Technical	<ul style="list-style-type: none"> Computer Programming and Utilization, Introduction to Electrical and Electronics Circuits, Fundamentals of Urban Science and Engineering, Data Processing in Remote Sensing, Probability and Statistics for Civil Engineers, Statistical Machine Learning and Data Mining
Others	<ul style="list-style-type: none"> Economics, Differential Calculus, Quantum Physics, Sociology, Environmental Science and Engineering

ACADEMICS & EXTRACURRICULAR ACTIVITIES

Scholastic	<ul style="list-style-type: none"> Awarded an AA grade (top 16%) in the course Introduction to Electrical and Electronic Circuits 5 Star coder on HackerRank Solved cumulative of 300+ DSA questions on Leetcode, Coding Ninja
Sports	<ul style="list-style-type: none"> Successfully completed the yearlong training in Weight-lifting under National Sports Organisation, IITB Completed 3 summers of training in swimming • Summited Kalsubai, trekking, 1646 M
Social	<ul style="list-style-type: none"> Conducted 120+ myth-buster sessions with 12+ NGOs, driving 2500+ eye donation pledges via Drishti Assisted 'NIDAAN' Breast Cancer Awareness nationwide in 100+ universities with NGOs and experts Engaged in NSS-organized Tree Plantation Initiative as part of IIT Bombay Green Campus commitment
Cultural	<ul style="list-style-type: none"> Participated in Annual Insync Dance Show (AIDS22), conducted by INSYN, The Dance Club, IITB Part of the department winning team that won Sarcasm 2021 conducted by SARC, IIT Bombay
Others	<ul style="list-style-type: none"> Participated in start-up pitch deck competition, ENB Buzz in a team of 3 conducted by E-Cell, IITB Participated in Industrial design competition conducted by Aakaar, Civil Engineering festival, IITB Successfully completed Python course on Learner space 2021, conducted by UGAC, IIT Bombay