

EDUCATION

VIT Bhopal University

B. Tech - Computer Science and Engineering- CGPA: - 8.37/10.0

Army Public School, Kirkee

CBSE 12th – 77.6%

Dr Martheophilus School, Pune

CISCE 10th -97.2%

Sep 2022 –Jul 2026

Bhopal

July 2022

Pune, Maharashtra

June 2020

Pune, Maharashtra

PROJECTS

CNN-Based Waste Segregation System

(Oct 2023 – Nov 2023)

Tools: Python, OpenCV, ResNet-34, CNNs

- Developed a ResNet-34 CNN model to classify waste into **12** categories, improving automated recycling processes.
- Trained on a dataset of **10,000** images and fine-tuned the model for **92%** high-accuracy object detection and segmentation.

JALDARPAN – Water Demand Forecasting

(July 2024 – Dec 2024)

Tools: Python, LSTM, Flask, Plotly

- Built an LSTM-based time-series model to predict water demand using historical municipal data.
- Engineered features and optimized hyperparameters, achieving **15%** lower RMSE.
- Built an interactive Flask dashboard with Plotly visualizations for real-time decision-making.

Bechdel Test Analysis

(June 2025-August 2025)

Tools: Python, Pandas, Stats Models (Regression, Classification), Matplotlib/Seaborn.

- Scraped and preprocessed **1000+** movie scripts, complemented with director/cast gender data for bias-aware.
- Performed statistical modeling (OLS regression, ANOVA) to identify correlations between film success metrics and gender ratios.
- Visualized trends (bar/pie charts, scatter plots) to highlight Hollywood's progress/regression over time.

TECHNICAL SKILLS

Languages: Python (Pandas, NumPy, Scikit-learn), MySQL, C++, Java (Basics).

Data Analysis: Exploratory Data Analysis, Statistical Analysis, Hypothesis Testing, Data Mining, REST APIs, Data Cleaning.

Machine Learning: Predictive Modeling (Regression, Classification, Neural Networks/CNNs), Supervised Learning, Model Evaluation, Feature Engineering (PCA, Scaling).

Data Visualization: Power BI, Seaborn, Matplotlib, Plotly, DAX, Figma.

Tools & Technologies/Cloud: GitHub, Microsoft Excel (Pivot Tables, Power Query), AWS.

CERTIFICATIONS

Great Learning: Introduction to Deep Learning (Dec 2023)

Coursera: Applied Machine Learning in Python (Aug 2024)

Skill Up: Power BI for Beginners (Feb 2025)

ACHIEVEMENTS

- Smart India Hackathon: Designed a user-friendly interface for reporting suspicious profiles, to contribute to fake account detection by **30%**, fostering a safer online environment.
- Gold medal in National English Olympiad.

EXTRA-CURRICULAR

- Google Developer Student Clubs** – (VIT Bhopal) Team Member of *Event Management & Outreach Team*. Organized a **200+** participant hackathon. Increased event participation by **40%** through social media.
- Diploma in Bharatanatyam: Completed 5 levels (practical + theory).
- Languages:** English (Fluent), Hindi (Fluent), Malayalam (Native), Marathi (Intermediate), German (A1).