

EDUCATION

VIT BHOPAL

Bachelor of Technology

Major in Computer Science specialization in Health Informatics

Cumulative CGPA: 8.67

Bhopal

Expected June 2026

KEY SKILLS

Programming Languages: Python, C++, SQL

AIML Concepts: Machine Learning, Deep Learning, Natural Language Processing (NLP)

Frameworks & Libraries: PyTorch, Scikit-learn, NumPy, Pandas, Matplotlib, Seaborn, OpenCV, YOLO

Tools & Deployment: Git, Flask, Streamlit, VS Code, PyCharm, Jupyter Notebook, Google Colab

PROJECTS

CAR DAMAGE DETECTION USING DEEP LEARNING [Link](#)

April 2025

[Python / PyTorch / Fine-tuned ResNet50]

- Developed a deep learning-powered Streamlit web app using a fine-tuned ResNet50 model in PyTorch to classify car damage types with 92% accuracy on front and rear damage images.
- Implemented transfer learning by fine-tuning a pre-trained ResNet50 model, strategically modifying the final fully connected layer with dropout and unfreezing specific layers to adapt the architecture for the niche classification task.
- Addressed model overfitting by implementing a comprehensive data augmentation pipeline (random rotations, flips, brightness adjustments) in PyTorch, which improved generalization and boosted validation accuracy by 15%.

CREDX – CREDIT RISK MODELING [Link](#) | [Live Deployment](#)

January 2025

[Python / Scikit-learn / Streamlit]

- Deployed CredX, a Streamlit-based credit risk assessment app using a logistic regression model trained on borrower demographics, loan details, and credit history features to predict default probability with 85% accuracy.
- Implemented a comprehensive scoring system that generates credit scores (300–900) and assigns risk ratings ('Poor' to 'Excellent') for personalized borrower evaluation and improved lending decisions.

GHOSTBOARD: AI VIRTUAL KEYBOARD USING HAND GESTURES [Link](#)

September 2024

[Python / OpenCV / MediaPipe]

- Built a real-time gesture-based virtual keyboard using Python, OpenCV, MediaPipe, and cvzone, achieving 95% gesture recognition accuracy and enabling touchless typing via webcam-based hand tracking.
- Integrated pynput library to simulate keyboard inputs, enabling the virtual keyboard to type detected alphabets directly into applications like Notepad.

EXPENSE TRACKING AND VISUALIZATION SYSTEM [Link](#)

June 2024

[Python / MySQL / Fast API]

- Engineered a modular expense management system combining Fast API backend and Streamlit frontend for efficient user experience.
- Leveraged Python data analysis tools to detect spending anomalies, generate visual insights through charts, and provide personalized budget predictions with 85% accuracy based on user history.

CERTIFICATIONS

- Supervised Machine Learning: Regression and Classification – Deep Learning.AI, Stanford University
- Python for Computer Vision with OpenCV and Deep Learning – Udemy
- IBM Machine Learning Professional Certificate – IBM

ACHIEVEMENTS

- Secured All India Rank 252 in the National Defense Academy (NDA) written examination, demonstrating strong aptitude, discipline, and national-level competitive excellence.
- Achieved 5-star ratings in C++ and Python on the HackerRank platform, demonstrating strong programming skills.
- Led a 10-member team to organize and execute 'GlamVIT', a flagship fashion event, while also serving as the lead anchor for an audience of over 200 attendees.