

Hitanshu Yadav

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EDUCATION

VIT Bhopal University

B.Tech in Computer Science and Engineering - 8.64 CGPA

Guru Har Rai Academy

12th ISC - 86.5%

Guru Har Rai Academy

10th ICSE - 82.5%

Bhopal, India

2022 - May 2026

Kanpur, India

2021

Kanpur, India

2019

PROJECTS

MediTalk for Patient

Technologies: FastAPI, React (TypeScript), HuggingFace Transformers, Tesseract OCR, gTTS

- Engineered an **AI-powered medical assistant** to simplify healthcare documents using **FastAPI** and **React**.
- Integrated **Tesseract OCR** to extract text from prescriptions with over **95% recognition accuracy**.
- Leveraged **BART** and **NLP models** from **HuggingFace Transformers** for summarization and medical Q&A.
- Enabled **multilingual Text-to-Speech** in **5+ languages** via **gTTS**, enhancing accessibility.
- Delivered a **fully responsive React (TypeScript)** frontend with **Tailwind CSS**, reducing onboarding time by **40%**.

Potato Disease Detection

Technologies: CNN, TensorFlow, OpenCV, Flask, Python

- Implemented a **CNN using VGG16** achieving **92% accuracy** in classifying potato diseases.
- Boosted model performance by **15%** through image **preprocessing** and **augmentation** with **OpenCV**.
- Trained on **2000+ images** using **transfer learning** for improved **convergence** and **generalization**.
- Crafted a **real-time Flask web app** for live disease detection from **camera input**.
- Minimized potential **crop loss by 30%** via early detection and **visual feedback**.

Hospital Management System

Technologies: Django, React.js, MySQL, REST API, JavaScript

- Architected a **full-stack hospital management platform** with **role-based access** for **500+ users**.
- Designed a secure **Django backend** with **RESTful APIs** and an **optimized MySQL schema** for **10,000+ records**.
- Implemented patient tracking, **authentication**, appointment scheduling, and **role-specific dashboards**.
- Created a **responsive React.js frontend** for seamless interactions and **real-time updates**.
- Automated admin tasks, reducing **workload by 30%** and **boosting operational efficiency**.

TECHNICAL SKILLS

Languages: Python, Java, C, C++, JavaScript, SQL

Technologies: TensorFlow, Keras, PyTorch, Scikit-learn, Flask, React.js, Django

Cloud/DevOps: AWS (EC2, S3), Docker, Jenkins

Databases: MySQL, PostgreSQL, MongoDB

Tools: Git, GitHub, Jupyter, VS Code

CERTIFICATIONS

Machine Learning Specialization – Coursera

Cloud Computing – NPTEL

Python Essentials – VITYARTHI

EXTRA-CURRICULAR ACTIVITIES

– Completed a 3-month **Full Stack Development Internship** (MERN Stack) at **SmartInternz**, building end-to-end applications using MongoDB, Express.js, React, and Node.js.

– Undertook a structured **30-Day DSA Challenge**, mastering core data structures and algorithms through daily problem solving on **LeetCode** and **GeeksforGeeks**.

– Completed the **Machine Learning** course by **Stanford University (Coursera)**, covering supervised/unsupervised learning, **SVMs**, **neural networks**, and **recommendation systems**.

– Published and maintained **10+ public projects** on GitHub including: **AgroSphereX**, **MediTalk**, **Mausam** (weather chatbot), **Flight Finder**, **Portfolio (TypeScript)**, **Hospital (Jupyter)**, and **Evolve (Java)**.

– Completed Google Cloud courses on **AI**, **Prompt Engineering**, and **Generative AI**, gaining hands-on experience with cloud-based AI tools and model deployment.