

Rakshita Makkar

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Education

VIT Bhopal University – Bhopal, Madhya Pradesh

- BTech in Computer Science (Core) | Expected: 2026

Loreto Convent School – Delhi Cantt, New Delhi

- 12th Standard (Physics/Chemistry/Maths) | Graduated: July 2022 | Percentage: 82%
- 10th Standard | Graduated: March 2020 | Percentage: 88.4%

Certifications

- Cloud Computing - NPTEL | Issued: April 2024
- The Bits and Bytes of Computer Networking - Google | Issued: December 2023
- Supervised Machine Learning: Regression and Classification – Stanford University and DeepLearning.AI | Issued: July 2023
- Python Essentials - Vityarthi | Issued: May 2023
- MATLAB - MathWorks | Issued: September 2022

Skills

- Programming Languages: Python (Proficient), Java (Intermediate), C++ (Intermediate), C (Beginner)
- Web Development: HTML (Proficient), CSS (Proficient)
- Database Management: MySQL (Proficient)
- Tools: MATLAB, Simulink, Microsoft Office, Excel, Canva
- Soft Skills: Leadership, Teamwork, Communication

Projects

- **Cascade - A GenAI Study Companion Software** - Ongoing
Role: Lead Developer
Technologies: Python, PyQt, LLM
Description: Developed a personalized study companion software that analyzes individual learning patterns, preferences, and exam schedules to generate customized study plans that increases efficiency by 50%. Key features include a Timer, To-do list, Notes, Music Player, Flashcards, and a GenAI-powered Chatbot.
- **Eradiket – One Stop Platform for Data Management** - April 2023 - September 2023 (months)
Role: Developer
Technologies: Python, AES, ChaCha 2.0
Description: Created a comprehensive data management software with system check capabilities, permanent deletion features, and encryption and decryption functionalities. The platform offers two prominent encryption methods: AES and ChaCha 2.0, with options for key sizes of 128, 196, or 256 bits.
- **Parkinson's Disease – Speech Analysis** - October 2024 – December 2024 (2 months)
Role: Developer
Technologies: Python
Description: Developed an ML-based system to detect Parkinson's disease from speech signals using features like MFCC, chroma, spectral centroid, and HNR. Trained and evaluated multiple ML models to analyse speech patterns.

Experience

- **Research Intern at Manav Rachna International Institute of Research and Studies**

Duration: 7 October 2024 – 31 December 2024

Description: Conducted research on Parkinson's disease, developing a speech analysis project using ML models with features like MFCC, chroma, spectral centroid, and HNR to improve detection accuracy.

Extracurricular

- **Lead** in Design Team for CyberWarriors Club
- **Member** in Data Science Club
- **Member** in Dance Club