

PROFILE SUMMARY

Aspiring Software Development Engineer with a strong foundation in problem-solving, data structures, and algorithms. Proficient in Python and C++, with a keen interest in backend development and building efficient applications. Enthusiastic about cloud computing, AI-driven solutions, and writing clean, optimized code. Eager to learn and contribute to innovative projects.

EDUCATION

- **M.Tech in Computer Science & Engineering** **2024 – Present**
PDPM IITDM Jabalpur, Jabalpur, India **CPI: 7**
- **B.Tech in Computer Science & Engineering** **2019 – 2023**
Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal, India **CGPA: 7.98**

PROJECTS

- **Intrusion Detection System using Federated Learning** *(Jan 2025 – Present)*
Mentor: Asst. Prof. Shivansh Mishra
 - Built a **privacy-preserving IDS** using **Federated Learning** to detect cyber threats across multiple networks.
 - Developed **1-D CNN-based attack detection**, achieving **99.56% accuracy** with **0.99 precision**.
 - Implemented a **secure Client-Server system** using **Flower Framework** to ensure **100% data privacy**.
- **Brain Tumor Detection Using Deep Learning** *(Aug 2024 – Dec 2024)*
 - Designed a **CNN-based deep learning model** to classify brain tumors from MRI images.
 - Used **Transfer Learning (VGG16)** for feature extraction, achieving **90%+ accuracy**.
 - Applied **image augmentation, normalization, and segmentation** to improve model generalization.

SKILLS SUMMARY

- **Programming:** Python, C++
- **Software and Tools:** NumPy, Pandas, Matplotlib, PyTorch, Jupyter, Anaconda, Google Colab, MySQL, VS Code
- **Concepts:** Machine Learning, Deep Learning, Data Structure and Algorithms, Operating Systems, DBMS
- **Soft Skills:** Communication, Teamwork, Problem-Solving, Adaptability

ROLES & RESPONSIBILITIES

- **Teaching Assistant, DSA Lab** - Mentored **100+ students** in DSA. *(Aug-2024)*