

Uday Upadhyay

udayupadh.1901@gmail.com | <https://github.com/Uday1901> | <https://www.linkedin.com/in/uday-upadhyay-510646198/>

+91-9325179663

About Me

Aspiring AI/ML Engineer with a passion for building intelligent systems and scalable machine learning solutions, currently enrolled in an Integrated M.Tech (Computer Science). During my internship at Aviso AI, I contributed to optimizing ML pipelines and enhancing model performance for real-time data processing. Proficient in Python, TensorFlow, PyTorch, and Scikit-learn, with hands-on experience in NLP, computer vision, and deep learning. I have a strong foundation in data structures, algorithms, and statistical modeling, and I'm eager to apply my skills to develop cutting-edge AI applications.

Technical Skills

Programming Languages: Python, Java, JavaScript, HTML, CSS

Data Structures & Algorithms

Frameworks and Technologies: React.js, Git, GitHub, Node.js, Express.js, Tailwind CSS (Intermediate)

Databases: SQL, MongoDB

Education

VIT Bhopal University

Bhopal, Madhya Pradesh

Integrated M.Tech Computational in Artificial Intelligences.

2022–2027

Relevant Coursework: Data Structures and Algorithms, Object Oriented Programming, Design and Analysis of Algorithms, Operating Systems, Databases, Computer Networks

Work Experience

Aviso AI | Machine Learning Intern

Developed and optimized machine learning models for real-time data analysis, improving prediction accuracy by 15%.

Assisted in fine-tuning NLP pipelines and implementing preprocessing enhancements for better text classification performance.

Researched and integrated state-of-the-art AI APIs to streamline model deployment and scalability.

Technologies: Python, TensorFlow, PyTorch, Scikit-learn, Hugging Face, FastAPI

Projects

Motion-Triggered Surveillance System

- Developed a real-time motion detection system using Python, OpenCV, and Raspberry Pi, which triggers alerts and records footage upon detecting movement. Implemented cloud storage integration for secure video backups and a user-friendly dashboard for live monitoring.
- Enhanced system efficiency with background subtraction algorithms and optimized performance for low-power devices, ensuring reliable 24/7 surveillance.

Tech Stack: Python, OpenCV, Raspberry Pi, Flask, AWS S3

Motion-Triggered Surveillance System

- Designed and deployed an Ethereum-based smart contract to automate and secure land registration processes, eliminating intermediaries and reducing fraud risks. Utilized Solidity for contract logic and integrated IPFS for decentralized document storage.
- Implemented a React.js frontend with MetaMask connectivity, enabling users to transparently verify

ownership, transfer deeds, and audit transaction history on the blockchain.

Tech Stack: Solidity, Ethereum, React.js, IPFS, Hardhat