

Ashutosh Sharma

Contact Details

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Education

- **Bachelor of Technology (B.Tech) in Computer Science and Engineering**
 - *Indian Institute of Technology, Mandi*
 - *CGPA: 8.49/10.00*
 - *Anticipated Graduation: 2024*
 - **Class XII**
 - *Montessorie Cambridge School, Raja Ka Bagh*
 - *CBSE Board*
 - *Percentage: 83.4%*
 - **Class X**
 - *Montessorie Cambridge School, Raja Ka Bagh*
 - *CBSE Board*
 - *CGPA: 10/10*
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Skills

- **Programming Languages:** C + + , Python, PHP, Kotlin
 - **Libraries:** Tensorflow, OpenCV, PyTorch, Keras, Scikit-learn, NLTK, Numpy, Pandas, Matplotlib
 - **Web Development:** HTML, CSS, JavaScript, Node.js, MySQL, ReactJS, MongoDB
 - **Blockchain:** Web3, Solidity, Smart Contracts, React
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Relevant Courses

- Data Structures and Algorithms
 - Information & Database Systems
 - Mathematical Foundation of Computer Science
 - Data Science-1,2,3 (Probability & Machine Learning)
 - Linear Algebra
 - Artificial Intelligence (Stanford online, CS:221)
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Projects

Age and Gender Detection on CCTV Videos

- *Developed a Python application for age and gender detection using CCTV videos.*
- *Utilized PyTorch, OpenCV, MTCNN, ImageAI, Deepface, Keras, and TensorFlow.*
- *Implemented SR GAN, DL, and Image Processing techniques.*

Tower Defense AI

- *Designed and developed a tower defense game and AI algorithm using Python and PyGame.*
- *Worked under the guidance of a mentor.*
- *Implemented and optimized a Genetic Algorithm from scratch, achieving human-level performance.*

Automated Proctoring

- *Developed an automated proctoring system using Django, TensorFlow, and OpenCV.*
- *Implemented login authentication using custom Face ID.*
- *Performed face verification during exams at regular intervals to ensure user integrity.*
- *Implemented functionality to detect and warn users for switching tabs during exams.*

Institute Students Website Revamp Project

- *Led the Frontend team in redesigning and revamping the institute's student website.*
 - *Utilized HTML, CSS, and JavaScript for the frontend development.*
 - *Successfully deployed the revamped website, which is now used by all students of IIT Mandi.*
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Achievements

- *Ranked 6th out of 100 participants in CodeRush, an intra-college competitive programming contest organized by AlgoUniversity.*
 - *Runner-up in the Build a Bot team competition, where a bot using LIDAR sensors was developed to detect the number of people in a room and perform room automation.*
 - *Won NFT by completing a dApp on Buildspace, involving the development of a Web3 app using Solidity and Smart Contracts.*
 - *Runner-up in the Chat-Bot team competition, where a chatbot was trained and deployed on Telegram as part of a college-level team competition.*
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Positions of Responsibility

- *Core Team Member at KamandPrompt, the programming club of IIT Mandi.*
 - *Event Organizer for ML101, an on-campus Machine Learning event.*
 - *Volunteered for the sponsorship team of FrostHack'22.*
 - *Served as the Server Administrator for IIT Mandi Wiki.*
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Extra-Curricular Activities

- *Volunteer at UDC (Dance Club of IIT Mandi).*
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Additional Information

- *Languages: English (Fluent), Hindi (Native)*
- *Hobbies: Dance, Coding, Photography, Reading*