

# SAURABH TIWARI

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**GitHub** | **Linkedin** | **Portfolio**



## INTRODUCTION

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A Bachelor of Technology student specializing in Information Technology with a strong foundation in C++, Python, and Java. Possesses hands-on experience in AI/ML projects using frameworks like PyTorch and libraries such as OpenCV. Demonstrates excellent problem-solving abilities and a collaborative mindset. Actively participates in college fests and events, contributing to team success and enhancing leadership and organizational skills.

## PROJECTS

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### CRIMINAL MANAGEMENT SYSTEM | [Link](#)

*React.js, Node.js, MYSQL, Oauth*

- A full-stack criminal management system designed to streamline crime data handling for Admins and Police Officers.
- Implements role-based login and dynamic dashboards.
- Features real-time crime filtering, dropdown selectors, search functionality, and interactive toggles for case status and prisoner status.

### VIDEO OF THOUGHT | [Link](#)

*Python, OpenCV, Mistral, spatio-temporal graph scene*

- Developed a video understanding pipeline using OpenCV and Python that extracts frames and identifies subject-predicate-object triplets per scene.
- Built semantic representations of actions using structured triplets to enable frame-level understanding.
- Exported scene data to JSON format for easy integration with downstream ML models or reasoning systems.
- Fine-tuned the Mistral language model to infer commonsense outcomes and predict likely future events based on scene context.

## ACHIEVEMENTS

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- **Winner, Independence Day Event** (MIT contingent) - Part of the winning team representing MIT in a college-wide competition.
- **Organizing Committee Member** - Contributed to the successful execution of college fests: *Tech Tatva* and *Revels*.
- **Hackathon Participant** - Participated in various college and intercollege hackathons, gaining hands-on experience in team-based problem solving.

## EDUCATION

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### Manipal Institute of Technology

Degree in Bachelor of Technology in Information Technology  
CGPA : 7.58

Manipal, India  
2023-08-01 - 2027-07-01

### Army Public School Mathura

Degree in 12 non-medical  
Percentage: 91.2%

Mathura Cantt  
2021-04-01 - 2022-05-01

### Army Public School Nagrota

Degree in 10th  
Percentage: 91.4%

Nagrota Cantt  
2017-04-01 - 2020-06-01

## CERTIFICATIONS

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- Mathematics for Machine Learning: Multivariate Calculus
- Mathematics for Machine Learning: Linear Algebra

## SKILLS

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Programming Languages: C++, Java, Python  
Libraries/Frameworks: React JS, Node JS, PyTorch  
Tools / Platforms: Git, GitHub, Ubuntu  
Databases: MYSQL, MongoDB