Saurabh Tiwari

spssgzp4@gmail.com | Varanasi , Uttar Pradesh
GitHub | Linkedin | Portfolio

Introduction

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

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*
- Used OpenCV and other Python libraries to extract frames from video and detect subjects, predicates, and objects in each scene.
- Constructed triplet relationships (Subject–Predicate–Object) to represent each frame semantically, enabling structured understanding of actions.
- All extracted information stored in a JSON format for easy integration with downstream ML models or applications.
- Fine-tuned Mistral (open-weight language model) to infer common-sense outcomes and predict possible future events in the video.

Achievements

- **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

Manipal Institute of Technology	Manipal, India
Degree in Bachelor of Technology in Information Technology	2023-08-01 - 2027-07-01
Army Public School Mathura	Mathura Cantt
Degree in 12 non-medical	2021-04-01 - 2022-05-01
Percentage: 91.2%	
Army Public School Nagrota	Nagorta Cantt
Degree in 10th	2017-04-01 - 2020-06-01
Percentage: 91.4%	

Certifications

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

Skills

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