


# AKASPREET


Final year Undergraduate Student

 [Portfolio](#)

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 [GitHub](#)

 Punjab, India

 [LinkedIn](#)

## SKILLS

**Languages:** C, C++, Python, SQL, HTML, CSS, JavaScript(Web Dev), MongoDB.

**IT Constructs:** Data Structure and Algorithms, Operating System, Database Management System.

**Libraries and Tools:** Pandas, TensorFlow, Matplotlib, YOLO, PyautoGUI, OpenCV, MySQL, Microsoft Office.

**Soft Skills:** Analytics Skills, Problem Solving, Communication, Leadership, Team Work, Presentation, Adaptability, Networking

## PROJECTS

[GitHub](#)  
(Dec'22-Dec'23)

### Traffic: Intelligent Traffic Control Solution

OpenCV and Machine Learning

- Implemented genetic algorithms to modify green lights in real time, cutting traffic delays by 25%.
- Optimized traffic flow at a four-way junction, achieving a 30% increase in intersection throughput.
- Conduct an investigation or audit to ascertain if there have been any breaches or infractions.

[GitHub](#)  
(June'23-July'23)

### Loan Guard

Machine Learning

- Developed a loan assessment model predicting repayment using income and interest rate inputs.
- Recommended risk mitigation strategies based on a 2.66 ratio to minimize non-repayment risk.
- Achieved over 91% model accuracy and 96% precision using ensemble techniques.

[GitHub](#)  
(June'22-July'22)

### Fitness 360 Website

MERN stack

- Let users make their own profiles and keep track of their health goals and progress over time.
- Aid customers in achieving fitness goals with nutrition advice, meal planning, and healthy recipes.
- Integrated MongoDB for dynamic updates and modifications directly from the frontend.

[GitHub](#)  
(April'22 - May'22)

### Drowsiness Detection

OpenCV and Machine Learning

- Implemented a system that uses facial landmarks and eye-tracking to monitor driver alertness.
- Tested extensively to optimize performance in various lighting and environmental situations.
- Issues an alert upon detecting driver unconsciousness or closed eyes by emitting a beep.

## EDUCATION

2020 - Present

### Thapar Institute of Engineering and Technology

Patiala, Punjab

Enrolled in B.E. Computer Engineering, **CGPA:** 7.47

2019 - 2020

### Gurukul Kurukshetra, Kurukshetra CBSE XII Board

Kurukshetra, Haryana

Science(PCM) with Computer Science, **Scored:** 85.20

2017 - 2018

### M S SR SEC SCHOOL, Kurukshetra CBSE X Board

Kurukshetra, Haryana

All subjects, **Scored:** 83.20

## CERTIFICATIONS

[LINK](#)

**Python Essentials by Cisco Networking Academy**

[LINK](#)

**Secured AIR 5251 rank in 1,37,000 in Coding Kaze 2023 by Coding Ninja**

## POSITION OF RESPONSIBILITY

(Sep'21 - Dec'21)

### Mentor at FROSH: Admission Counselling Cell: Event Organizer

[Link](#)

- Orchestrated multiple events at the institute level for the entire college, including the Freshman Welcome.
- Facilitated multiple workshops for incoming students and assisted them in adjusting to college life.

(Dec'20 - May'22)

### Core Member at MARS : Mechatronics and Robotics Society: Lead Member

- Conducted orientation and oversaw recruitment processes for the entire incoming class.
- Acquired knowledge of the fundamental principles and operations of the Skylark drone.

## RELEVANT COURSEWORK

- Data Structures
- Database Management
- Algorithms Analysis
- UI and UX Specialist
- Operating System
- Artificial Intelligence
- Software Engineering
- Linux Shell Scripting
- Computer Networks
- Machine Learning
- Test Automation
- Cloud and DevOps