

# EESH NAUGRAIYA

Junior Undergraduate -Mechanical Engineering, Minor in Electrical Engineering   ✉ eeshn21@iitk.ac.in | 📞 +91 7972970923 📧 Eesh | 🌐 Eesh

## Academic Qualifications

Year	Degree	Institute	CPI/%
2021 - Present	Bachelor of Technology	Indian Institute of Technology Kanpur	7.1/10.0
2021	Class XII (CBSE)	Jai Academy	88.4%
2019	Class X (CBSE)	Jai Academy	92.4%

## Scholastic Achievements

- Secured All India Rank **2077** out of  $\sim$  **0.14 million** candidates in **Joint Entrance Examination(JEE)-Advanced 2021**
- Secured All India Rank **1255** out of  $\sim$  **1 million** candidates in **Joint Entrance Examination(JEE)-Mains 2021**

## Work Experience

- **Research Intern- Fleet Management** | *Prof. Shaurya Shriyam & PeerRobotics* | *Dept. of ME, IIT Delhi*   *Nov'24 - (Ongoing)*
  - Conducted thorough data analysis from **PeerRobotics** focusing on roles of **robots, task mapping & missions** in warehouse.
  - Formulated a precise problem statement aligned with data analysis, providing basis for addressing **fleet management challenges**.
  - Explored & applied industry best practices in **warehouse simulation & multi-agent path-finding** to get insights & knowledge.
  - Implemented advanced techniques to optimize **pathfinding & task allocation** in warehouse simulation & multi-agent pathfinding.

## Key Projects

- **Mine Sweeping Drone** | *Prof. K.S. Venkatesh* | *Dept. of Electrical Engineering* , IIT Kanpur   *May'23 - Aug'23*
  - Analysed materials for making carrier of drone considering factors like **compliance, draggability, & weight distribution**.
  - Explored innovative carrier designs for drones, like **protective covers & wheeled/roller mechanisms** for enhanced dragability.
  - Designed a compliant carrier with optimized weight distribution integrated with the drone for **obstacle-free mine sweeping**.
  - Applied **CV & LiDAR** techniques to enhance Drone Navigation, Enabling **wide area scan** while avoiding obstacles.
- **NLP & Sentimental Analysis** | *Prof. Nisheeth Srivastava* | *CS616 Course Project* | 🌐 GitHub   *Aug'23 - Nov'23*
  - Developed **hybrid recommender systems** with **collaborative filtering** using NLP techniques like **LDA & deep learning**.
  - Performed thorough preprocessing & **feature engineering**, to boost **sentiment analysis** accuracy for precise classification.
  - Explored **Affective Computing**, with sentiment analysis applications, and **emotion inference**, broadening scope & impact.
  - Engaged in **goals representation, reinforcement learning, explore-exploit dilemma & information-theoretic goals**.
- **Mathematical Trading Strategies** | *Stamatics Society* | 🌐 GitHub   *May'23-July'23*
  - Employed **data scraping, charting tools, & technical analysis** to identify market indicators, driving strategic trading decisions.
  - Conducted **back-testing & forward testing analysis**, using technical indicators to optimize strategies for increased profitability.
  - Applied **statistical hypothesis testing, chart & candlestick patterns**,for robust strategies, yielding consistent returns.

## Technical Skills

- **Programming:** C, C++, HTML5, CSS, Python, R, JavaScript, MatLab, Java
- **Tools:** Fusion 360, SolidWorks, ROS, VS Code, MS office, NOTION, LabView, ReactJS, NodeJS, Figma, PGAdmin, SQL

## Relevant Courses

(\*–Ongoing)

Fundamentals of Computing(ESC101) Electrodynamics(PHY103) Introduction to Machine Learning	Linear Algebra, & ODE(MTH102) Introduction to Electronics(ESC201) Bayesian Statistics(CGS698C)	Complex Analysis(MSO202) Human Centric Computing(CS616) Governance of GVCs(MBA717)
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## Positions of Responsibility

**Organizer, Fine Arts Events** | *Antaragni'23, IIT Kanpur*   *2023-24*

<b>Leadership</b>	◦ Leded a 3-tier team of <b>50+ secretaries &amp; volunteers</b> responsible for conduction of <b>6 fine arts events</b>
<b>Initiatives</b>	◦ Secured sponsorship engaged with numerous organizations, ideated 30+ MOUs & proposals securing Rs. 5 lakh ◦ Initiated & converted <b>Monetary &amp; Barter deals</b> with different judges, academics and companies.
<b>Impact</b>	◦ Oversaw increase in event reach by 30% YoY reaching upto 1 lakhs fine arts groups & artists over digital media.

## Secretary, Astronomy Club

*2022-23*

- Coordinated prominent events like **Introduction Lecture, SnT Pavilion, workshops, and talks**, ensuring great experiences.
- Orchestrated remarkable **Jupiter Opposition observation session**, captivating **3500 residents**, with the celestial spectacle.
- Organized **Hyperion**,a pan-India case study challenge, captivating **1000+** participants,fostering enthusiasm for astronomy.
- Successfully organized **Mandikini**, IIT Kanpur's astronomy fest, inspiring **over 500** passionate students to explore the cosmos.

## Extra-Curricular Activities

- Represented IIT Kanpur at **Inter IIT Cultural Meet 6.0**, showcasing talent in Nukkad Natak & securing **podium position**.
- Mesmerized audiences at **Antaragini**, the cultural fest of IIT Kanpur,captivating judges, securing **second position** in stage play.
- Trained & mentored **IIT Kanpur's Mime Team** for **Inter IIT Cultural Meet 6.0** enhancing to their outstanding performance.
- Mesmerized audience at **Antaragini**, the cultural fest of IIT Kanpur,captivating judges, securing **second position** in street play.
- Mesmerized audiences at **Thomso**, the cultural fest of IITR, with engaging **dramatics performances**, leaving lasting memories.