

Ranbir Kumar



VIT Chennai, Vandalur,
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Robotics Engineer

Dynamic Robotics Design Engineer with three years of experience in developing innovative robotic systems that push the boundaries of technology and functionality. Expertise encompasses CAD modelling, material analysis, and AI integration, driving the creation of advanced robotic arms and compact space systems. Proven ability to participate in international challenges and design missions that enhance operational capabilities in diverse environments, including lunar exploration. Committed to leveraging engineering skills to contribute to groundbreaking projects in the robotics domain.

Skills

CAD Modelling	Skillful
Material Analysis	Beginner
Web Developer	Skillful
ROS programmer	Beginner
AI models	Beginner

Employment History

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Robotics Design Engineer
Technocrats Robotics, Chennai
May 2024 – January 2027

Robotic Arm Design: Developed a robotic arm with 3+3 degrees of freedom, featuring stepper motors, a lead screw mechanism, and a differential gear system for precise control.

CubeSat Mission: Chose a 6U CubeSat (10 kg) for a mission, showcasing expertise in compact space robotics.

Lunar Rovers: Your mother and daughter rovers are operational on the Moon, with the daughter rover 40 km from the base at Shivshakti Point.

International Rover Challenge 2024-
: Participating with a rover designed to collect and analyze soil samples, perform field tasks, and submit reports.

Education

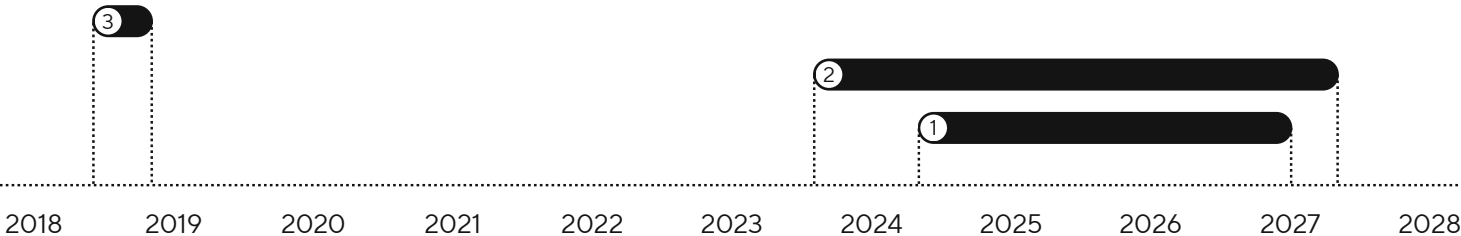
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Bachelor of Technology in
Computer Science with-
specialization in Artificial
Intelligence and Machine
Learning
Vellore Institute of Chennai,
Chennai
August 2023 – May 2027
- I am currently pursuing a **Bachelor of Technology (BTech)** degree in **Artificial Intelligence (AI) and Machine Learning (ML)** at **Vellore Institute of Technology (VIT), Chennai**. This program is equipping me with the knowledge and skills necessary to excel in the rapidly evolving fields of AI and ML. Before joining VIT, I completed my schooling at **Lotus Valley International School, Noida**, where I developed a

Extra-curricular Activities

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Cricket
Uttar Pradesh Cricket
Association, Noida
June 2018 – November 2018
- I had the honor of representing **Gautam Buddh Nagar** district at the **Uttar Pradesh Cricket Association (UPCA) Under-16 trials**. During the trials, I was recognized as the **highest wicket-taker**, demonstrating my skill and consistency in the game. This achievement highlights my dedication, athleticism, and ability to perform under pressure, further showcasing my commitment to sports excellence.



Robocon 2025: Scored 100/100 in Level 1, demonstrating top-level robotics skills.

AI Posture Correction Project-
: Working on an AI system to correct body posture during gym exercises, combining robotics and health.

strong academic foundation that has supported my technical and innovative pursuits in higher education.

