

Kanav Tayal

+91 6239004561 kanavtaylor99@gmail.com Chandigarh, India

Profile

Mechanical Engineering student with a strong focus on the automotive industry and hands-on experience in designing and optimizing vehicle components. Proficient in CAD software such as AutoCAD, SolidWorks, and ANSYS Workbench. Skilled in thermodynamics and fluid mechanics, leveraging advanced engineering tools to deliver efficient and sustainable solutions. Eager to contribute to projects in robotics, renewable energy, and manufacturing processes.

Education

Punjab Engineering College (PEC) <i>B.Tech in Mechanical Engineering, CGPA: 7.89</i>	Chandigarh, India 2023–2027
DAV Public School <i>High School Diploma, 89.2%</i>	Ludhiana, India 2022–2023

Areas of Expertise

Core Skills: Automotive Engineering, Fluid Mechanics, Computational Fluid Dynamics (CFD), CAD and 3D Modeling, Research and Technical Writing, Robotics, Manufacturing Processes

Soft Skills: Problem-Solving, Collaboration, Leadership, Analytical Thinking

Professional Experience

Aravali Hostel, PEC <i>Maintenance Secretary</i>	Chandigarh, India 07/2024–Present
<ul style="list-style-type: none">Managed maintenance operations for a hostel housing 300+ residents, resolving technical and logistical issues efficiently.Coordinated with contractors and student representatives, reducing maintenance response time by 30%.Oversaw renovation projects, dedicating 20+ hours monthly to ensure timely and high-quality delivery.	
Campus Ambassador <i>E-Cell IIT Roorkee</i>	Roorkee, India 11/2024–Present
<ul style="list-style-type: none">Acted as the liaison between E-Cell IIT Roorkee and PEC students, promoting entrepreneurial events and workshops.Increased student engagement by 25% through effective communication and outreach strategies.Supported event logistics and assisted in the management of entrepreneurial challenges and competitions.	
Team Prometheus, PEC <i>Team Leader</i>	Chandigarh, India 07/2024–10/2024
<ul style="list-style-type: none">Directed a team of 15 members to design and fabricate a human-powered rover for NASA's Human Exploration Rover Challenge (HERC).Achieved a 15% reduction in vehicle weight through structural optimization without compromising safety.Conducted 50+ simulation tests using ANSYS and MATLAB to enhance vehicle performance.	
ICDMT, PEC <i>Research Contributor</i>	Chandigarh, India 07/2024–Present
<ul style="list-style-type: none">Published a research paper titled "Bubble Tracking in Confined Channels: Velocity Analysis in Hele-Shaw Cells."Invested 100+ hours analyzing fluid dynamics using Open-CV and Image J, achieving an 95% accuracy in velocity calculations.Presented findings to an audience of 200+ professionals and researchers, earning a Certificate of Appreciation.	
PEC FEST 2024 <i>Marketing and Event Coordination Member</i>	Chandigarh, India 07/2024–09/2024

- Led marketing initiatives for Pec Fest, increasing event attendance by 20% through targeted social media campaigns and promotions.
- Collaborated with the design team to create engaging promotional content and event graphics.
- Coordinated with local organizations and student groups to expand outreach and visibility.
- Assisted in coordinating logistics for various event segments, ensuring a seamless experience for participants and attendees.
- Managed volunteer teams, aligning them with event schedules and responsibilities for efficient execution
- Acted as a point of contact for guest speakers and performers, ensuring timely arrivals and event readiness.
- Analyzed campaign performance metrics to optimize marketing strategies and improve reach.
- Supervised the setup and breakdown of event venues, maintaining safety standards and minimizing delays.

Student Partner

Chandigarh, India

Internshala

06/2024–07/2024

- Promoted Internshala's internships and online courses to peers and the student community, enhancing participation rates by 15%.
- Organized workshops and sessions on career development and skill-building to benefit students' professional growth.

Publications

- **Kanav Tayal**, "Bubble Tracking in Confined Channels: Velocity Analysis in Hele-Shaw Cells" – Published research paper presented at the International Conference on Design and Manufacturing Technologies (ICDMT 2024), PEC Chandigarh.

Achievements

- Presented research on fluid mechanics at ICDMT 2024 and received recognition for innovative object detection
- Boosted attendance by 20% through effective marketing strategies for PEC FEST 2024.
- Enhanced event coordination processes, ensuring a smooth experience for all attendees at Pec Fest 2024.
- Improved maintenance processes in Aravali Hostel, benefiting over 300 residents.
- Awarded the Achievers Award for outstanding cultural and technical contributions during 2023–2024.
- Increased student engagement and participation through roles as Internshala Student Partner and E-Cell IIT Roorkee Campus Ambassador.

Skills

Technical Skills::

- CAD Software (AutoCAD, SolidWorks, Fusion, ANSYS)
- Simulation and Analysis (ANSYS Workbench, MATLAB, Open Foam, Basilisk)
- Image Processing and Computer Vision (Open CV, Image J)
- Data Analysis and Visualization (MATLAB, Python, Microsoft Power BI, Excel)

Software Proficiency::

- Microsoft Office Suite (Word, Excel, PowerPoint)
- Adobe Creative Suite (Creative Cloud, Firefly, Premier Pro(Basic))
- Project Management Tools (Trello, Asana)

Soft Skills::

- Leadership and Team Management
- Problem-solving and Critical Thinking
- Communication and Presentation
- Adaptability and Collaboration

Languages

English: Native

Fluent

Hindi: Native

Fluent

Punjabi: Native

Fluent