

# Aditya Vikram Jain

Junior Undergraduate  
Department of Chemical Engineering

✉ adityavj21@iitk.ac.in | ☎ +91-9799885446  
inADITYA VIKRAM JAIN | 🌐 jain-aditya-vikram333

## Academic Qualifications

Year	Degree/Certificate	Institute	CPI/%
2021 - Present	B.Tech	Indian Institute of Technology Kanpur	6.0/10
2021	CBSE(XII)	MDS Public School, Udaipur	96%
2019	CBSE(X)	St. Paul's Senior Secondary School, Udaipur	95.4%

## Scholastic Achievements

- Secured **All India Rank 3897** in **JEE Advanced 2021** among 1.5 lakh candidates who were already shortlisted
- Secured **All India Rank 5625** in **JEE Mains 2021** among the 12 lakh candidates who appeared in the examination
- Qualified **Stage-1** of **Kishore Vaigyanik Protasahan Yojana (KVPY) 2020** among 50 thousand candidates.
- Recognized as **National Talent Search Examination (NTSE) Scholar 2018-19** among 10 lakh candidates

## Key Projects

- **Introduction to Data Science in Chemical Engineering** (Chemineers Society - IIT Kanpur) (Dec'22-Feb'23)
  - Attained a proficiency in **Python**, using the libraries of **NumPy, Pandas, Matplotlib**
  - Developed and implemented custom **Linear Regression models** using **Sklearn library** to predict the specific volume of saturated vapor based on pressure and compared the results with the help of **scratch**
  - Created an **Artificial Neural Network** from scratch using dataset of **9568 data points** and obtained **88% accuracy**
- **Multipurpose Flour Mixer** (Mentor: Prof. Arvind Kumar, Mechanical Engineering, IIT Kanpur) (Aug'22-Nov'22)
  - Collaborated with a team of **8 members** under the Course **TA202A (Manufacturing Processes)**
  - Learned and worked on **Autodesk Fusion 360** and **Inventor Professional** to make a 3D design of our project model
  - Fabricated and used worm and worm wheel mechanism to construct a working model of a Flour mixer system
  - Implemented various manufacturing processes like **milling, drilling, lathe, cutting, 3-D printing, CNC**
- **Virtual Company Project** (Mentor: Prof. R. Ragipani, Chemical Engineering, IIT Kanpur) (Jan'23-Apr'23)
  - Coordinated a team of **14 members** under the Course **CHE261A (Chemical Process Industries)**
  - Led virtual company in **market analysis**, identifying **high-value chemicals** based on profitability and raw material availability. Conducted a thorough screening of 3 chemicals, considered reports from chemicals.gov.in
  - Coordinated with **R&D and Technical Services team** to design a **scaled-up process**
  - Facilitated material balance, estimated approximate capital cost, and analyzed the environmental safety measures

## Technical Skills

- **Programming Languages and Libraries:** C, C++, Python, MATLAB, Numpy, Pandas, Matplotlib, Sklearn
- **Tools and Utilities:** Jupyter Notebook, AutoCAD, Autodesk Fusion 360, MS Excel, L<sup>A</sup>T<sub>E</sub>X

## Positions of Responsibility

- **Academic Mentor, Counselling Service Team** (Sep'22-Present)
  - Guided and mentored **freshmen** students in acclimatizing to the competitive environment of the Institute
  - Conducted **AM sessions** to help solve freshmen's academic doubts in **ELC courses** over 2 semesters
  - Taught **10+ students** in **one-to-one mentoring sessions** to provide academic support for their first year of IITK
- **Secretary, Dramatics Club, Media and Cultural Council** (Aug'22-May'23)
  - Mentored multiple first-year students in acclimatizing to the environment and learning drama skills in the Institute
  - Coordinated and helped the club organize various events like **Summer Play and Workshop, PG Orientation**
  - Guided a group of 20+ students to perform in the **Freshers' Night, Freshers' Orientation** and **Dram Eve**
  - Participated in various cultural festivals outside of IIT Kanpur like **Thomso'22** and **Inter IIT Cult Meet 5.0**
- **Senior Executive, Hospitality and Transport, Techkriti'23** (Sep'22-March'23)
  - Coordinated with the team to get **2200+ participants** with **10000+ registrations** from different colleges across India
  - Responsible for organizing online competitions in dance, dramatics, music, literature, films, and photography
  - Collaborated with **50+ students** from colleges across the country to through **CA Program** of Techkriti
  - Acted as a bridge between participants and the Tech Heads, Techkriti, and facilitated a smooth flow of information

## Relevant Courses

Fundamentals of Computing(ESC101A)	Computational Methods in Engineering(ESO208A)
Chemical Process Industries(CHE261A)	Linear Algebra and Differential Equations(MTH102A)
Chemical Engineering Thermodynamics(CHE221)	Introduction to Electronics(ESC201A)

## Extra-Curricular Activities

- Worked with a team of organisers in conducting **Fresher's Orientation** and handled more than **1200 first-year students**
- Participated in Street Play and represented IIT Kanpur in **Thomso'22** - the Cultural Fest of IIT Roorkee
- Secured **5th Position** in **Inter-IIT Cultural Meet 5.0** held in **IIT Madras** in Street play out of **20+ IITs**
- Secured **2nd Position** in **Antaragni'23** - the Cultural Fest of IIT Kanpur in Street Play
- Represented school as a key player in the **District-level Basketball Tournament** held in Udaipur, Rajasthan
- Secured **2nd Position** in **Debate Competition (Paricharcha)** hosted at **IIM Udaipur** under Audacity'18