

# A KUMAR

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## EDUCATION

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**Indian Institute of Technology Kanpur**  
Junior Undergraduate  
Department of Chemical Engineering

*July 2008 - Present*  
Overall GPA: /10

## TECHNICAL STRENGTHS

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<b>Computer Languages</b>	C/C++, MATLAB
<b>Software &amp; Tools</b>	HTML, LaTeX, Excel, Gerris, Mathematica, ASPEN Plus, Tecplot

## EXPERIENCE

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<b>IIT Bombay</b> <i>Undergraduate Research</i>	May 2015 - July 2015
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- Employed CFD software Gerris to carry out 20 simulations and analysed different shapes during oscillation
- Derived Lamb's dispersion relation for free oscillation and applied it to calculate strength of different modes
- Analysed simulated data to obtain velocity field and compared it with theoretical data to obtain results

<b>IIT Kanpur</b> <i>Manufacturing Process Project - Dragon Model</i>	January 2015 - April 2015
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- Worked in a team of six people and came up with a model of Dragon with movable wings
- Designed and fabricated a skeleton model of dragon with movable wings from scratch in lab employing processes of welding, brazing and casting
- Received Certificate of Appreciation among 40 projects for its artwork and detailing

## ACADEMIC ACHIEVEMENTS

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Ranked in National Top 0.2% (amongst 1,200,000 candidates) in JEE Mains 2013 and Top 1% (amongst 150,000 candidates) in IIT-JEE Advanced 2013

Ranked in the State-wise Top 1% (amongst 70,000 candidates) in State level Engineering competitive Exam (MP PET)

Stood first in MBD Talent Search Exam conducted by state government, competing against more than 1000 participants

## RELEVANT COURSES

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### Core Courses

Fluid Mechanics & its applications  
Thermodynamics  
Heat Transfer & its applications  
Mass Transfer & its applications  
Transport Phenomena (ongoing)

### Other Courses

Computational Methods in Engineering  
Fundamental of Computing  
Probability and Statistics  
Calculus & Linear Algebra  
Introduction to Mechanics

## POSITION OF RESPONSIBILITY

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### **Techkriti 2015 - Technical and entrepreneurial Festival**

August 2014 - March 2015

*Public Relations*

*IIT Kanpur*

- Spearheaded a 2-tier team of 40 people to successfully conduct professional shows, exhibitions and talks
- Organized talks in Techkriti by eminent personalities like Dr K. Radhakrishnan (Chairman, ISRO), Peter Schultz (Co-inventor, Fibre optics) and David Hilmers (NASA Astronaut) with more than 1000 attendees
- Successfully organized Auto expo, Space expo and Defence expo together for the first time in Techkriti
- Promoted awareness through social campaigns like Make a wish, Adopt a tree and Teen Suicide Prevention

### **Students' Placement Office**

April 2015 - Present

*Internship Coordinator*

*IIT Kanpur*

- Coordinating with team of 20 students responsible for facilitating internship proceedings of 650 students involving 150 companies
- Responsible for developing contacts with corporate recruitment teams of several firms for internship and placements
- Organized sessions on Personality Development and Career Awareness by esteemed alumni for over 1600 students

### **Hall Executive Committee**

April 2014 - Nov 2014

*Secretary*

*IIT Kanpur*

- Coordinated with 12 members to led a team of 200 students in inter hall technical, cultural and sports competition of institute
- Planned an annual budget of 2 lakhs for proper functioning of hostel with more than 400 residents

## EXTRA-CIRRICULAR

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Secured Gold in M.P. State Throw Ball competition and represented district in State Hand Ball competition

Represented Institute in Udghosh'13 and secured second prize in Kho-Kho intramurals

Secured second prize in Dance Drama competition in Galaxy'14, inter hall cultural competition of IIT Kanpur

Won second prize in Electromania, circuit game designing competition in Takneek'13, inter hall technical festival of IIT Kanpur