

Chandan Kumar Sinha

Mechanical & Aerospace Engineering Indian Institute of Technology Hyderabad Email- me13b1009[at]iith.ac.in ME13B1009 B.TECH Male

DOB: 15.03.1996

Examination	University	School/ Institute	Year	CPI/ %
Undergraduation	IIT HYDERABAD	IIT HYDERABAD	2017 (expected)	8.2 (by IIIrd SEM)
Intermediate/+2	CBSE	D.A.V. Public School, Koylanagar	2013	96.2%
Matriculation	CBSE	D.A.V. Model School, CFRI	2011	10

KEY SCHOLASTIC ACHIEVEMENTS

- All India Rank 2899 in JEE-Advanced 2013 among 1.5 lakh candidates
- All India Rank 919 in JEE-Mains 2013 among 1.4 million candidates
- State Rank 3 in JCECE & 140 in WBJEE, BITSAT Score 342
- National Rank 155 & School Rank 1 in 15th National Science Olympiad, 2013
- International Rank under 250 & School Rank 1 in 5th and 6th International Mathematics Olympiad

PROJECTS UNDERTAKEN

• <u>IIT Hyderabad Student Satellite Project (Ongoing)</u> Spring 2014 - Head: Shanti Swaroop Kandala (Ph.D scholar, ME & Aerospace Engineering)

Attached with this project since its very inception in April, 2014. Currently the core member of ADCS (Attitude Determination & Control System), this project so far the biggest students' understaken project in IITH. I'm also the responsible for the IITHSSP website's design & development.

• <u>IITH Library Update : Working with Drupal (Ongoing)</u> Spring 2015 Head: Mallikarjuna C. (Librarian, IITH)

Took this project out of my sheer interest to work with Content Management System. Responsible to update the whole IITH library website by the end of this semester with new features and better browsing.

- Rubik's Cube Solver (Ongoing)

 Project taken under Robotics club where I teamed with a 3rd year senior to build an automated process to solve Rubik's cube through robotic arm. Its fun to learn new stuffs.
- Mechanically Automated Periodic Garden Watering System Autumn 2014
 Made a garden watering system addressing the problem of dying plants
 when the owner is out of station. Its was a 'Kinematics and Dynamics of
 Machinery' course team project which I headed. The mechanism used
 worm gears which we made by 3-D printing.
- <u>Chrome Extension for refined Youtube Recommendation</u> Summer 2014 Took this under our club projects floated for summer in which we had to develop an extension which refines the Youtube recommendation based on specified keywords. Made using simple HTML, CSS, JavaScript and bit of JSON. The project is still worked on for robustness with better database.
- Vibrational Frequency Detector using light

Made a device to measure the vibrational frequency of mechanical systems using light under our Independent Project. The device used optical converters, ADC along with data acquisition kit & software and simple bread-board circuit. Proposed to be applicable in our BAJA car subject to enhanced portability. Only person to take part individually.

SKILLS AND **INTERESTS**

- Robotics & Aerospace Sincerely regular in all club sessions in my first year, I attended various robotics workshops. Worked with Arduino IDE and MATLAB for inhouse robotics project out of self interest.
- Programming- Coming from non-programming background, coding really got me interested. Quickly picked up C, C++ & Web development basics (HTML, CSS, JavaScript, PHP). Qualified Google Code Jam-2014 online round in my first year itself.
- Writing Started my personal blog 'www.thevindicatedaxiom.wordpress.com' in second semester as a tribute to my teacher. Regular writer on Quora and currently the content manager at TEDxIITH.
- Quizzing & Puzzle solving An avid quizzer since my 5th class. Have represented my school at various district and state level competitions. Active in college quizzes as well.
- Entreprenuership Member of IITH E-cell in my first semester. Won Business Simulation Game organized by MobiStore among all individual and group participants to get opportunity to attend E-Summit 2015 at IIT Bombay.
- Dance, Music & Photography Core member of IITH Dance Club in my first semester. Currently a member of IITH photography club.

COMPUTER PROFICIENCY

- OS- Windows, Linux
- <u>Programming Languages</u> C, C++, HTML, CSS, JavaScript, PHP, \LaTeX 2ε
- Simulation Softwares SolidWorks, SolidEdge, ANSYS, MATLAB, Arduino
- Database Familiarity MySQL, PostgreSQL, phpMyAdmin

KEY COURSES UNDERTAKEN

Core Breadth

Kinematics & Dynamics of Machinery

Probability Theory

Mechanics of Solids **Engineering Mechanics**

Linear Algebra & Complex Numbers

Fluid Mechanics

Quantum Chemistry

Real Analysis, Calculus

Thermodynamics*

Data Structures & DBMS*

Mechanical Workshops

Creative Product Design*

Material Science & Metallurgy

Manufacturing Science*

Liberal Arts - Economics, Language, cognition & computation*

Note: The * marked courses would be completed by April 2015.