

ANURAG PANDEY

Junior Undergraduate Student
IIT Kanpur

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OBJECTIVE

To obtain an internship and work in an organizational environment to improve my knowledge and enhance my technical skills.

EDUCATIONAL QUALIFICATIONS

Year	Degree / Certificate	Institute / School	CPI / %
2010 - present	B.Tech.- Electrical Engineering	IIT Kanpur	7.6 / 10.0
2010	AISSCE (XI - CBSE)	St. Xaviers Public School, Gorakhpur	90.6
2008	AISSE (X – CBSE)	St. Xaviers Public School, Gorakhpur	93.8

SCHOLASTIC ACHIEVEMENTS

- Secured **All India Rank 607** in IIT-JEE-2010 with a percentile of **99.9** among around 500,000 candidates.
- Secured **2nd** Rank in X-CBSE in district.
- Awarded the **Certificate Of Appreciation** for the project “Single Point Dynamic Balance Ship” under the course “Introduction to Manufacturing Process”.

PROJECTS

- Formula SAE Car** (Ongoing)
(Project Advisor: Dr Avinash Agarwal, Associate Professor, Department of Mechanical Engineering, IITK)
 - Core team member of an integrated project of around **20 lakhs** to design and manufacture a formula car of our own college following rules of **Formula Society of Automotive Engineers**.
 - Responsible for complete design, simulation and manufacturing of **Braking System, Vehicle Dynamics and ergonomics** for our car.
 - Integrated vehicle dynamics with power-train subsystem.
 - Have successfully finished the final design of **2-pedal assembly**, after taking into account all the ergonomics and doing the iterative stress analysis using Solidworks and Ansys.
 - Designed cast iron floating **brake rotors** as per required performance specifications after doing both thermal and stress analysis using Solidworks and Ansys.
 - Participating in the event **FSAE Michigan**, May 2013.
- Optimum Broadcasting Scheme for Video-On-Demand Service** (May 2012 onwards)
(Project Advisor: Dr. Ajit Kumar Chaturvedi, Professor, Department of Electrical Engineering, IITK)
 - Motivation:** Proposing a novel video transmission scheme minimizing required server bandwidth with zero start-up delay.
 - Analysed and Simulated existing unicast and broadcast techniques of video transmission.
 - Proposed a **new hybrid algorithm** for video broadcasting. Analysing and iteratively improving upon it.
- Direction Of Arrival Estimation Of Speech Signal in a Reverberant room** (Ongoing)
(Project Advisor: Dr.Rajesh.M.Hegde, Assistant Professor, Department of Electrical Engineering, IITK)
 - Implemented on MATLAB the frequency selective MUSIC method for a Reverberant Room like an Auditorium where array of microphones is used.
 - Adopted a Least Square based phase compensation method to overcome phase distortion caused.
 - Innovation:** Applied and Simulated Group Delay technique to get an entirely new method which can potentially be extremely efficient over conventional methods.
- Single point dynamic balance Ship** (July-Nov 2011)
 - Course project : TA201 – Introduction to manufacturing processes
 - Simulated whole balance mechanism in Autodesk Inventor taking into account all manufacturing defects so as to balance the ship on a single point.
Implemented the whole simulation using several manufacturing process like brazing, welding, casting drilling and was **awarded Certificate of Appreciation** for that.

- **Mechanical Gramophone Reader** (July-Nov 2011)
 - Course Project: TA201- Introduction to Manufacturing Process
 - An attempt to understand and draw parallel between a CD Reader and a Gramophone player.
 - Designed and Simulated whole mechanism applying all relevant mechanical and manufacturing constraints. Manufactured the complete model using various manufacturing processes.

TECHNICAL SKILLS

- Programming Language : C, HTML
Software Skills: SOLIDWORKS, Ansys, Autodesk Inventor, AutoCAD MATLAB, GNU Octave, SPICE, Microcap.

RELEVANT COURSES

(* - enrolled in that course)

Control System Analysis	Digital Electronics and Microprocessor technology*
Data Structures and Algorithms	Introduction to Microelectronics
Principles of Communication*	Power Systems*
Signals, systems and Networks	Introduction to Game theory*
Probability and Statistics	Differential Equations and Fourier Series
Complex Analysis and Linear Algebra	Real Analysis, Differentiation and Integration
Engineering Graphics	

POSITIONS OF RESPONSIBILITY

- **Chairman, SAE - IIT Kanpur Chapter** (July'12- present)
 - Successfully started the involvement of SAE, IITK into Science and Technology Council activities under the head 'IITK Motorsports'.
 - Managing a team of around 60 members to ensure smooth conduction of every activity under it.
 - Involved in **designing and conducting a two tier recruitment process** for technical team and the marketing team this year in which more than **200** students applied.
 - Managing the entire budget of around **5 lakhs** of long term projects like a **Formula Student Car** under SAE,IITK.
 - Team will participate under **my leadership** in the event **FSAE Michigan'13**.
- **Head, Brakes and Control Systems, IITK Motorsports** (Januray'12- present)
 - Responsible for complete design and manufacturing of brake system and wheel assembly taking into account the other subsystems for the **Formula Car**.
 - **Mentoring** newly recruited members by teaching all design softwares and giving complete relevant knowledge.
- **Executive, Public Relations, Antaragni'12** (May'12 – present)
 - Involved in inviting various film directors for '**Director's Cut**', and personalities for the panel discussion '**India Inspired**'.
 - Involved in inviting various foreign and Indian conventional and non- conventional artists for performances and workshops.
 - Selecting and Managing Junior-executives for smooth conduction of events and proper hospitality of artists, director and other personalities.
- **Assistant Coordinator, Film Club, IITK** (May'11 – April'12)
 - Conducted workshops and lectures on Video making and Film making.
 - Ensured smooth conduction of competitions under the club in Spectrum,2012- The Intra IIT Films and Media Event.
- **Marketing Executive, SAE IITK** (May'11 – Feb'12)
 - Contacted and gained sponsorships from several companies for **IITK Motorsports**.

EXTRA-CURRICULAR ACTIVITIES:

- Worked as **Student Guide** (2011-2012) for **Counselling Service**, IITK and mentored junior students.
- Performed a street play BHEDBHAAY in Galaxy,2011(Intra IIT Cultural Competition) and stood **third** in it.
- Won **First prize** in video making competition in Spectrum,2010 , an Intra IIT Films and Media competition.
- Won **Third prize** in Science Quiz in Takneek,2010 (Intra IIT Technical Competition).