

## EDUCATION / ACADEMIC ACHIEVEMENTS

Year	Degree	Institute	Performance
2013-Present	B. Tech, Electrical Engineering	Indian Institute of Technology, Kanpur	8.9 / 10
2012-2013	CBSE Sr. Secondary (XII)	Maharishi Vidya Mandir, Jabalpur	94.6%
2010-2011	CBSE Secondary (X)	Christ Church Boys Senior Secondary School, Jabalpur	8.6 / 10
Competitions	Secured an All India Rank (AIR) 427 in JEE Advanced 2013, amongst the top 2 lakh candidate		2013
	Secured an All India Rank (AIR) 785 in JEE Mains 2013, amongst 14 lakh candidates		2013
	Awarded Academic Excellence for being Institute Topper in AISCCE-2013 by Maharishi Vidya Mandir, Jabalpur		2013
	Secured Worldwide Rank 13 in Technothon, IIT Guwahati, 2012		2012
	Shortlisted in Top 150 students (All over India) in 2013 for Indian Statistical Institute		2013

## INTERNSHIP

Hindustan Unilever Limited (ULIP 16), Supply Chain			(May'16 – Jul'16)
Efficiency Improvement of Hot Water Generator (HWG) Plant			
<ul style="list-style-type: none"> <li>Studied and understood the principle of Heat exchangers, HSD Burner, Calorifier etc. and designed Process Flow Diagram of HWG plant</li> <li>Successfully diagnosed 3 major factor reducing efficiency, namely Scaling effect, High Hardness and TDS and Logic fault in SCADA system</li> <li>Devised corrective action and preventive action with Maintenance Plan for countering each factor</li> <li>Suggested Steam and Solar Alternatives for HWG with detailed analysis of Scale, Cost, Payback period and Return of Investment.</li> </ul>			
Key Achievements	<ul style="list-style-type: none"> <li>Improved efficiency from 24.5% to around 85% ensuring profit of 1.3 million INR per year to the factory</li> <li>Automated HWG efficiency tracking system for monitoring HWG efficiency regularly</li> <li>Received Pre-Placement Interview offer from Hindustan Unilever Limited, rated high on Standards of Leadership</li> </ul>		

## RELEVANT COURSES

Computer Science	Data Structure & Algorithm Machine Learning Techniques	Fundamentals of Computing Computer Networks	Algorithms II Embedded Systems
Electrical Eng.	Digital Electronics Digital Communication	Microelectronics Power Electronics	Modern Control System Digital Control System

## KEY ACADEMIC PROJECTS

Real-time Object Detection and Classification from CCTV footage course project under Prof. H. Karnick			(Jan'16 – Apr'16)
<ul style="list-style-type: none"> <li>Developed Real-time Machine learning algorithm to classify vehicles and pedestrian from the CCTV footage</li> <li>Integrated HoG descriptors to model a Linear SVM and Random Forest classifier with accuracy of ~ 97.6%</li> <li>Deployed Data Mining algorithm to optimize Learning Set and incorporated MOG subtraction tool for foreground detection</li> </ul>			
PROJECT HUMANOID Dean of Resources and Alumni Research Project			(Oct'14 – Dec'16)
<ul style="list-style-type: none"> <li>Designed CAD model of complete body in Autodesk inventor, incorporating 24 degree of freedom</li> <li>Manufactured all the Body parts using acrylic, aluminum sheets and abrasive water jet cutting process</li> <li>Studied the Inverse Kinematics and PID control system and developed and deployed an efficient algorithm for implementing the same</li> </ul>			
AUTONOMOUS WALKING LEGS (BIPED) under Robotics club, IIT Kanpur			(May'14 – Jul'14)
<ul style="list-style-type: none"> <li>Studied and examined the trajectory of Center of Gravity of the human body while walking, running, turning and kicking</li> <li>Developed a feedback system for detecting obstacles and autonomously avoiding them by using ultrasonic sensors</li> <li>Designed and Implemented an efficient walking, turning and kicking algorithm using minimal number of actuators</li> </ul>			

## POSITION OF RESPONSIBILITY

Core Team Operations Member, Counselling Service			(Mar'15 – Mar'16)
Leadership	<ul style="list-style-type: none"> <li>Selected in a team of 11 from the entire batch after a grueling interview process</li> <li>Jointly led a team of 133 student guides and coordinated with numerous faculty members for smooth conduction of the 6-day long Orientation Program for 853 freshmen at IIT Kanpur</li> </ul>		
Initiatives	<ul style="list-style-type: none"> <li>Designed an entirely new Counselling Service website with a fluid layout and ease of use</li> <li>Developed a new software on database management for smooth and fast conduction of the Interview process</li> <li>Planned and Implemented the complex group movement of 853 freshmen in the Orientation Program</li> </ul>		
Mentoring	Coordinated with 44 students, 4 counsellors, 2 psychiatrists and numerous faculty members to provide academic, financial and emotional assistance to students in the campus		
Secretary Robotics Club, IIT Kanpur	Student Guide, Counselling Service, IIT Kanpur	Academic Mentor, Counselling Service, IIT Kanpur	Event Coordinator JOSH 15, IIT Kanpur

## TECHNICAL SKILLS

Programming Languages	C, C++, Python, MATLAB, GNU Octave, HTML 5, PHP, CSS
Simulation Software	MicroCap, OrCAD, Simulink(MATLAB), Autodesk Inventor, Autodesk 3D's Max, AutoCAD

## EXTRA CURRICULAR

Technical	<ul style="list-style-type: none"> <li>Secured 1<sup>st</sup> Rank in ELECTRADE competition, Techkriti 2016, IIT Kanpur</li> <li>Secured 1<sup>st</sup> Rank in Takneek 2014 in Robotrix, Spearheading the team of five members</li> </ul>
Cultural	Performed dance in Fresher's Night 13, Played guitar in various regional band competition