

## PROJECT

### FOUNDER & TEAM LEADER, Formula SAE (race car) team

- **Conceptualized** the idea & got it approved by the Director, IIT Kharagpur & Dean SRIC-Prof.P.P.Chakrabarti
- Led a team of 40 students, involved in the making of a **formula style race car** (**First time** at IIT Kharagpur)
- **Represented India**, Formula Student UK '10. Shortlisted in top 6/(105) for Airbus Teamwork Award 2010
- Secured the **largest funding for any student led project** of **INR 1 Million** from SRIC IIT Kharagpur
- Acquired industry sponsorship worth **INR 0.7 Million** & industry internships for team members
- **Impressed** the Director & Dean by successfully completing the car & **convinced** them to **fund the next car**
- Started working on **next car** to take part in Formula Student UK'11. **Chief modifications** being: Engine mapping, Weight reduction from 300kg(on '10 car) to a target weight of 240kg

## INTERNSHIPS

### WARWICK MANUFACTURING GROUP, UNIVERSITY OF WARWICK, UK

May'09 - July'09

- Analyzed half hourly electricity generation data for the entire year & identified patterns which were unexplored before
- Developed a **novel vehicle smart charging model** for Hybrid & Electric vehicles in MATLAB Simulink® and MS-Excel
- Proposed strategy led to a **24% reduction in CO<sub>2</sub> emissions** from Hybrid & Electric vehicles as compared to uncontrolled charging
- Co-authored a **Research Paper** currently under review by an **International Journal, "Energy"** (Impact factor: 2.952)
- Orchestrated International collaboration between WMG & IIT, focusing on student exchange & joint research. Leading to internships at WMG for 6 students including 2 from FSAE team. Also, WMG will hosting us at the Formula Student UK event

### LKT, UNIVERSITY OF ERLANGEN-NÜRNBERG, GERMANY

May'08 - July'08

- Awarded Internship grant from **German Academic Exchange Service, DAAD**
- Developed a GUI for an application to illustrate bending of beams which was incorporated in one of the modules of the department

### MARUTI SUZUKI INDIA LIMITED, GURGAON

May'07 - July'07

- Value analysis of HVAC system of Maruti Suzuki's Alto & Wagon R models. Modified piping system to reduce the cost by **Rs 11/car**
- Led to an **annual savings** of **INR 0.9 Million** (approx) with a daily production of 270 cars (on an average) in the assembly plant

## ACADEMIC QUALIFICATIONS

Examination	Year	Institution/School	CGPA/ Percentage
Dual Degree, Mechanical Engineering	2006-Present	Indian Institute of Technology, Kharagpur	7.46/10.00
AISSCE (CBSE)	2006	Bal Bharati Public School, New Delhi	88.40%
AISSCE (CBSE)	2004	Bal Bharati Public School, New Delhi	96.60%

## ACADEMIC ACHIEVEMENTS

SCHOLASTIC	▪ Secured <b>Rank 23</b> at state level (Delhi) in National Mathematical Olympiad	2002
	▪ Selected for Indian National Chemistry Olympiad based on national <b>top 1%</b> ranking in NSEC	2005
	▪ Selected for the prestigious <b>CSIR Youth for Leadership in Science programme</b>	2005
	▪ Awarded as Junior Science Talent Search Examination ( <b>JSTSE</b> ) Scholar	2004
	▪ Merit Certificate by CBSE for being among the <b>top 0.1%</b> in India in Social Sciences in AISSCE	2004
	▪ Awarded <b>Scholars' Gold Medal</b> for outstanding overall performance for <b>six consecutive</b> years	2006
COMPETITIVE EXAMINATIONS	▪ Qualified major <b>Pre-Medical entrance exams. AIR 505</b> out of around 350,000 in <b>CBSE PMT</b>	2006
	▪ Qualified Delhi PMT (Rank 140), CMC Vellore (1 of 7 selected in India) & AFMC Pune (top 105)	2006
	▪ Among <b>Top 50 all over India (Delhi Rank 5)</b> in Class 10 <sup>th</sup> CBSE examination	2004

## POSITIONS OF RESPONSIBILITY

CHAIRMAN IMechE, UK Student Chapter	<ul style="list-style-type: none"> <li>▪ Established UK based, <b>Institution of Mechanical Engineers'</b> first ever student chapter in India, 2009</li> <li>▪ Organized IMechE's flagship event, Speak out for Engineering for the <b>first time in India</b></li> <li>▪ Conducted 4 zonal prelims with 300 participants &amp; the finals at IIT Kharagpur with 15 finalists, 2010</li> </ul>
REPRESENTATIVE INDIA DAYS	<ul style="list-style-type: none"> <li>▪ <b>Represented IIT Kharagpur</b>, at "India Days" conference organized by DAAD in Germany, 2008</li> <li>▪ Presented an overview on IIT Kharagpur before a <b>100 delegate German audience</b> &amp; Directors of 3 IITs</li> </ul>
HALL SECRETARY	<ul style="list-style-type: none"> <li>▪ Technology Representative of RK Hall at TSG as a part of a 7 member team from various halls of residence</li> </ul>

## EXTRA-CURRICULAR ACTIVITIES

- **Winner** Relic hunter, worldwide online puzzle with participation of 950 teams, Kshitij 2009
- Member of **Silver** winning RK Hall Basketball team in inter-hall tournament, 2008
- **Senior Diploma** (four years) in **Tabla** from Prayag Sangeet Samiti, Allahabad, 2004
- Love to travel & have travelled across 10 countries, 8 in Europe. Passionate follower of Manchester United F.C. & Formula 1