

Academic Qualifications

Year	Degree/Certificate	Institute	CPI/%
2017 - Present	B.Tech(Mechanical Engineering)	Indian Institute of Technology, Kanpur	7.4/10
2016	CBSE(XII)	Kendriya Vidyalaya No.1,BBSR	89%
2014	CBSE(X)	Kendriya Vidyalaya,Bhadrak	10/10

Scholastic Achievements

- Secured **11th Position** in **Business & Sales presentation** among **120 teams** in BAJA SAE 2020 at Pithampura,India
- Secured **12th Position** in **Endurance event** and an **Overall 13th** out of **100 teams** in Mega ATV Championship 2019
- Secured **All India Rank 1221** in **JEE Advanced 2017** and **All India Rank 2457** in **JEE Main** among 1.5 million Students
- Secured **All India Rank 691** in **NEST(National Entrance Screening Test) 2016** among 1.1 Lac candidates
- Secured **Rank 353** in the final round of **5th IMO(International Mathematical Olympiad)**

Professional Experience

• **Foods Business Division, KITES ITC***May'20-June'20*

Objective	-Map baking technologies to various products,understanding any specific product requirement and energy consumption -Evaluation of electrically operated baking oven and vacuum drying in ITC biscuits current portfolio -Capability assessment of current indirect forced convection oven from product finish and energy stand point
Strategy	-Engaged with project managers and factory members in various plants to understand the oven workings -Created a Decision Matrix Model and applied Hypothesis based Model for mapping baking technologies -Constructed Design of Experiments in Minitab and validated against actual experiments in Trichy plant -Collaborated with abroad companies Aasted, Haas-Meincke and BVT to discuss electric oven and vacuum drying
Impact	-Proposed most relevant Baking technology to various product types based on technical DOEs and hypothesis -Presented a technical and financial plan of feasibility of implementation of electric oven and vacuum drying in ITC -Developed relations between oven settings and product parameters and optimized Indirect Forced Convection Oven settings in Trichy Plant to obtain better quality products

Key Projects

- **BAJA SAE, B19, IITK Motorsports** (Faculty Advisor: Dr. Santanu De) *Dec'17-Mar'19*
 - Designed and Fabricated BAJA (All Terrain Vehicle) by student team to compete in Mega ATV-Championship 2019
 - Performed **static structural, fatigue and vibrational analysis** on driveshaft, gearbox and engine mount using **Ansys**
 - Worked on full **vehicles's CAD assembly** by rectifying the errors in individual part geometry using **Solidworks**
 - Fabricated in-house **carbon fibre driveshaft** as an alternate of Alloy Steel for improving the **handling of torsional forces**
- **BAJA SAE, B20, IITK Motorsports** (Faculty Advisor: Dr. Santanu De) *Apr'19-Jan'20*
 - Designed and Manufactured another All-Terrain Vehicle rectifying the shortcomings of previous vehicle to compete in BSI 2020
 - Presented a **Business and Logistics Plan** at Baja SAE India 2020 for convincing the executives of a hypothetical manufacturing company to purchase our vehicle design and put it into production at the rate of **4,000 vehicles** per year
 - Implemented **CVTech CVT tuning** with most efficient flyweights and spring combination by proper vehicle testing
 - Optimized previous powertrain design and achieved a weight reduction of 10 kg by using **Gaged CVT and lighter gearbox**
- **Intelligent Ground Vehicle** (Prof.Mangal Kothari, IIT Kanpur) *May'19-July'19*
 - Performed **powertrain calculations,motor selection and eletrical layout** of the bot and designed **chassis** of the vehicle
 - Worked on the **control of mobile robots** and assisted team member for **electrical and mechanical assembly**
 - Used **ROS(Robot operating system)** for interfacing sensors like camera, LiDAR,IMU,GPS and Odometry

Position of Responsibilities

- **Technical Head, IITK Motorsports** *May'19-May'20*
 - Led a **3-tier** team of 20 students to work towards design, fabrication and testing an All-Terrain vehicle within a span of 1 year
 - Efficiently managed human and financial resources (budget: **22 Lac**) available with team and responsible for deadlines
 - Decided on order of outsourcing and manufacturing parts taking factors such as availability, cost and utility into account
- **Powertrain Subsystem Lead, IITK Motorsports** *May'19-May'20*
 - Responsible for design of full powertrain system of vehicle and coordinated with team members to achieve target
 - Took spontaneous decisions in case of design faults found at crucial times through regular discussions and design briefings

Technical Skills

- **Programming Languages and Library:** C/ C++, Python, Matlab, Latex
- **Software and Tools:** Ansys(Static Structural), Solidworks, Minitab, ROS, Arduino IDE, Autodesk Inventor

Extra-Curricular Activities

- Successfully conducted workshop on **Automobiles and IC engine** in Techkriti'18 in which more than 150 students participated
- Participated in **RoboTricks**, Takneek '17, an intra-campus technical event and **Pool Captain in Crescendo'17**,Cultural Event
- Took part in **Galaxy'18** (Inter-hall cultural competition) in dance events and secured **1st position**
- Participated in **Football and Volleyball** campus tournaments and won 1st prize at Institute Tug of War