

Kapil Wanaskar Mechanical Engineering

Indian Institute of Technology Bombay

**Specialization: Computer Integrated Manufacturing** 

09D10033

**Dual Degree (B.Tech+M.Tech.)** 

Male

DOB: 18/07/1990

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2014	6.54
Received research internship program award, University of Alberta, Canada				['11]
Awarded student exchange <b>fellowship</b> by Federal Armed Forces University, Germany				['12]
		INTERNSHIPS		

## University of Alberta, Canada - Received Letter of Recommendation

[May '11 - Jul '11]

Investigation of failure mechanisms of cells in oil-sands

- Design of Experiments Deployed 3D laser profile technique to detect damage on material wall
- Overcame component failure challenges by exploiting mathematical model of the phenomenon
- Achieved 45% reduction in cell damage by proposing and optimizing set of 27 parameters

# Helmut Schmidt University, Germany - Awarded Letter of Recommendation

[May '12 - Jul '12]

Characterization of microstructure and properties of coatings in spray technology

- Ascertained structural characteristics of material using X-ray diffraction technology, correlated same with properties of work-piece material
- Conceptualized efficiency model of impact process by developing an algorithm, accomplished 95% accuracy

**Indian Institute of Management, Ahmedabad** - Supply Chain Management *Proposal on national food security system benchmarked with international units* 

[Nov '11 - Dec '11]

- Critically analyzed operational report of Food Corporation of India (FCI) of last **12** years (2001-12) to identify bottlenecks in distribution system
- Established **9% increment** in channel efficiency through proposing a novel model and collating same with food security units of European Union and North America
- Drafted case report on 'Collaboration of Adani Agri Logistics with FCI', to be used as teaching aid

## KEY ACADEMIC PROJECTS

#### **Vibration check in CNC machining - Master's Thesis**

[Feb '13 - Present]

- Formulated mathematical models of vibration on MATLAB, experimented with process parameters
- Designed 3D model of machine component to analyze and simulate the runtime vibration
- Achieved 8% reduction in vibration to enhance machine lifetime by 13%, saving INR 11.3 lakh

## **Development of Intelligent Stethoscope** - Collaborative Engineering

[Jan '12 - Apr '12]

- Designed an innovative stethoscope to process heart beat information without personnel intervention
- Conducted QFD, AHP, DFM and Fault tree analysis to validate the design and demonstrated prototype to **7** member panel of **doctors** and industry professionals branding it as a **low cost rural** alternative

#### POSITIONS OF RESPONSIBILITY

### **Junior Design Engineer** - Baja SAE India 2011

[Jul '10 - Apr '11]

All-Terrain Vehicle racing event, organized by the Society of Automotive Engineers (SAE) India

- Secured 1<sup>st</sup> position among 80 teams in 'RAFTAR'- Award for innovating fastest and lightest car
- Worked with a team of 20 students from diverse educational background
- Played pivotal role in building the lightest car by designing and fabricating the **customized** gear box

#### Coordinator, Events - Techfest 2011

[Aug '10 - Jan '11]

- Brought in 15 professionals from across the country to deliver talks and conduct workshops
- Spearheaded team of 21 volunteers to execute 14 back-to-back events, attended by over 2000 visitors

## EXTRA CURRICULAR ACTIVITIES

- Member of NSS (National Service Scheme) and worked in Group of Rural Activities
  - Implemented low cost generic drug's door step delivery service for NGO in the village
- Organized 4 inter cultural activities and 2 trips in Canada for 50 students from across the globe
- Avid Traveller Backpacked across 9 countries in Europe and North America
- Enjoy adventure sports and Martial Art (Yellow belt holder)