

Gaurav Sharma Mechanical Engineering Indian Institute of Technology, Bombay

 ${\bf Specialization: Computer\ Integrated\ Manufacturing}$ 

08D10042

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

Male

DOB: July 10, 1990

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	7.39

### Internships

## National University of Singapore, Singapore

Autonomous Underwater Vehicle

May'11 - July'11

- Recommended ABS Plastic and Polyurethane as suitable materials for the nose part of the AUV
- Conducted **impedance tube** test to prove ABS Plastic to be a better option
- Modeled sonar and performed CFD analysis on it to minimize the loss of sound waves reaching it

### Oil & Natural Gas Coorporation, Mumbai

Modeling and Analysis of Offshore Structures

May'10 - June'10

- $\bullet \ \, {\rm Modeled} \ \, {\rm a} \ \, {\rm 4-legged} \ \, {\rm existing} \ \, {\rm well-head} \ \, {\rm platform} \ \, ({\rm situated} \ \, {\rm in} \ \, {\bf Bombay} \ \, {\bf High}) \ \, {\rm using} \ \, {\rm the} \ \, {\rm drawings} \ \, {\rm available}$
- Carried out linear static wave analysis and pinpointed the possible mode of failures of the platform
- Remodeled the platform to overcome those failures using proper dimensions and hydrodynamics

### Position of Responsibilities

### Cultural Councillor, Hostel 7

Leader of a team of 10 Secretaries of different cultural genres

April'10 - March'11

- Utilized a budget of INR 1,00,000 including initiatives like Music Room Soundproofing
- Introduced H7 Idol, Guitar & Drum Playing and Movie-Making workshops, Debate Sessions
- Organized preparatory intra-hostel competitions for each of 20 inter-hostel cultural championships
- Efforts led to award winning performances in 12 of them as compared to last years' 8

### Social Secretary, Hostel 7

Worked towards making the hostel most-happening hostel by involving all the hostelites

July'09 - March'10

- Utilized a budget of INR 25,000 in organizing events to promote interaction among hostelites
- Introduced Gaming Nights, DJ Nights & Movie Nights; organized all the Indian festivals

#### Coordinator, Mood Indigo'09

Leader of a team of 6 oraganizers

• Invited **3 DJ groups** of Mumbai for an event of DJ workshop; lasted for around 3hrs and attended by **300 students** of different colleges

# **Key Academic Projects**

## Wire EDM of Silicon Ingot

 ${\it Guide:}$  Prof. S. S. Joshi

Master's Thesis May'12 - Present

- Designed and fabricated a platform to **rotate the silicon ingot** by an external motor
- Used above set-up to eliminate the accumulation of the removed material; minimizing abrupt wire breakage
- Mathematically modeled the **temperature profiles** for work-piece and tool
- Used the above temperature profile to find the material removal rate and kerf-loss of the ingot

## Awards & Achievements

- Awarded **Hostel Organizational Color** for an outstanding contribution to hostel cultural scene as Cultural Councillor(2010)
- Recipient of Appreciation Certificate for being topper among 70,000 students in 8th Standard District Board Examinations (2003) by Honourable State Agriculture Minister on Independence Day
- Amongst the **top 6 students** among 200 applicants worldwide selected for summer internship (2011) in Acoustic Research Lab, National University of Singapore, Singapore.
- Amongst the top 100 candidates among 15,000 applicants, selected for full scholarship programme for Tata Jagriti Yatra-2011

# Extra Curricular Activities

- Awarded **Performing Arts Festival Color** for dramatics performance and contribution to production part in PAF-2011
- Secured 3<sup>rd</sup> position among 28 entries in **Advertisement Making** Inter-Hostel General Championship; I was the singer of the title song of the GC
- Secured **2<sup>nd</sup>** position in **MechView**, a video making contest organised as a part of the annual festival **Radiance** of the Department of Mechanical Engineering, IIT Bombay in 2012
- Completed a year long NSO course on **synthesizer**-playing in my first year in IIT Bombay