

GAURAV BHARTI

Mechanical Engineering

Indian Institute of Technology, Bombay

Specialization: Computer Aided Design (CAD) &

Automation

09D10024 UG Fifth Year (Dual Degree) Male DOB: 25.09.1990

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2014	8.01
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- Scholastic Achievements
- Honored with SBI Merit Scholarship for consistent performance since high school (High School: 95%, Senior School: 92.6%)
- Granted prestigious WISE Scholarship by DAAD for research internship in Germany; Predicated with "Summa Cum Laude"
- Selected for NIT Merit Fellowship for securing a rank of AIR 469 and state rank of 9 in AIEEE 2009 among 10 Lakh students

Industrial and International Experience

Asian Paints, Rohtak Plant | Power Consumption Optimization at Fully Automatic Water Based Plant

May'13-June'13

- Critically analyzed numerous trends in DCS during the paint dispersion and mixing in Twin Shaft Dispensers
- Presented a long-term and short term action plan with 8 innovative proposals to reduce the power consumption by 35% and to make it more consistent; Implementation of two proposals saw 20% decrement

TU Kaiserslautern, Germany | Long Range Correction for Quadrupoler fluids for Planer Interfaces

May'12-July'12

- Analyzed various fluids with Quadrupoler interaction without considering these moments against the experimental results
- Derived and Implemented new long range correction schemes for Quadrupoler interaction using numerous simulations

Universität Paderborn, Germany | Molecular Simulation MS2

May'11-July'11

- Performed simulation for around 250 binary mixtures; Analyzed and correlated the results with experimental results
- Reduced total time of the simulation by 20% for Molecular Dynamic Simulations and 35% for Monte Carlo Simulations

Key Academic/Research Projects

Adaptive Algorithm to Active Noise Control | Masters Dissertation, Mechanical Engineering, IIT Bombay May'13-Pres

- Studied various Adaptive Algorithms used currently in Active Noise Control and identified the scope of improvement
- Currently developing an **experimental setup** to test various algorithm to provide accuracy to control of impulsive noise

Medical Device Innovation | OrthoCAD Lab, Mechanical Engineering, IIT Bombay

Jan'13-May'13

- Proposed and conceptualized new design of an artificial human elbow joint with severely fractured humarus
- Was judged as the **best device** among six others by a panel of doctors, design and material engineers

Leadership Roles

General Secretary | Hostel 7, IIT Bombay

Apr'12-Apr'13

Elected by huge margin by 450 hostel inmates; Led **three-tier team** of 34 members with **50 initiatives**; Managed a budget of **₹12 Lakhs**

Achievements

- Awarded with prestigious "Institute HGSC Organizational Color", (2/7000) for an outstanding tenure
- Led Hostel to win "Overall Sports GC", first non-fresher hostel to lift the trophy after at least 20 years

Infrastructure

- Got commenced **long pending** Bathroom renovation project worth ₹72 Lakhs removing administrative and Infrastructural bottlenecks; Got approved and sanctioned projects worth ₹ 80 Lakhs in total
- Developed the tender by inspected specifications and got constructed basketball court worth ₹2,76,000, achieved **price reduction of 31.4%** (₹1,26,719) with better specifications

Hostel Initiative

- Improved the mess satisfaction rate from **38% to 74%** with various initiatives for quality, menu and sanitation, stood **2nd in best mess competition**
- Developed Hostel award constitution; got it approved making it independent of subsequent council

Mentorship

Mentored **78 council members** in span of 3 years for their personal & hostel development as a whole

Cultural Councilor | Hostel 7, IIT Bombay

Mar'11-Mar'12

Elected unanimously for development of hostel culture; Led team of 10 members and managed the cultural budget of ₹ 2 Lakhs

- Strengthened overall Cultural GC position to 3rd as compared to 9th of last year; 1st position among Non-fresher hostels
- Awarded with "Hostel Organization Color (4/450)" for remarkable tenure

Others Positions of Responsibilities: Women Cell Nominee '13, Department Academic Mentor' 13, Social Secretary' 10

Extra-Curricular Activities

Social

- Associated with "One Child, One Light", Raised ₹ 25,000 for providing solar lamps to rural children
- Led to the implementation of Minimum Wages Act for Mess employees with continued negotiation

Digital Arts and

A Freelancer Designer, Proficient in Photoshop; Developed many posters and T-Shirt designs

Fine Arts

- 1st position 3D modelling GC'11; Awarded PAF Color'11 (6/420) for contribution in designing of Prod
- Adventure Sports Adventure Sports Enthusiast; Trained in Rock and Wall climbing, Jumaring, Rappelling & snow crafting