



Hussain Bharmal
Mechanical Engineering
Indian Institute of Technology, Bombay
Specialization: Computer Integrated Manufacturing

10D170002
UG Second Year
Male
DOB: 4th march,1991

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	8.60
Intermediate/+2	gujarat state education board	P.V.Modi school,rajkot	2010	83.80
Matriculation	gujarat state education board	P.V.Modi school,rajkot	2008	87.38

OTHER ACADEMIC HONOURS/DETAILS

- Cleared the Regional Mathematics Olympiad (stage 1 of Olympiad) conducted by the Homi Bhabha Centre of Science and Education from the state of Gujarat in the years 2008 (state rank 17) and 2009 (state rank 5). Have also appeared for the Indian National Mathematics Olympiad (Stage 2 of Olympiad) in the years 2009 and 2010.
- Cleared (among top 1% of the students appeared) the National Standards Examinations in Physics and Chemistry (stage 1 of Olympiad) conducted by the Indian Association of Physics Teachers and the Association of Chemistry Teachers respectively in the year 2009. Appeared for the Indian National Physics Olympiad and Chemistry Olympiad (stage 2 of Olympiad) in 2010.
- Cleared the Indian Institute of Technology- Joint Entrance Exam (IIT-JEE) in 2010 with an all India rank of 998.
- Cleared the All India Engineering Entrance Exam in the year 2010 with an all India rank of 1155 and state rank of 26.
- Cleared ISAT, the Indian Institute of Space Science and Technology's entrance exam in 2010.
- Recipient of IIT Bombay's merit-cum-means scholarship for the academic year 2010-2011 and 2011-12.

TECHNICAL ACTIVITIES

- **Solar cooker:**
 - Have made a solar cooker as a part of a course project under Professor Rangan Banerjee.
 - The cooker was a hybrid between the box cooker and the parabolic reflector.
 - The plane mirror of the box was replaced by a parabolic one and a secondary plane mirror was used to focus sunrays on the box. This increased the efficiency (can be calculated) of this hybrid cooker more than the normal box cooker or the parabolic reflector.
 - This decreases the cooking time required for cooking under similar conditions.
- **Computer game:**
 - Made a computer game as a part of computer science course under Professor R.K. Joshi.
 - The program was based on the famous math puzzle game go-figure.
 - Flashlight Toolkit had been incorporated in the game for graphics.
- **Industrial visits:** have been on industrial visits to TATA Power plant (Trombay), Varmora tiles factory (Rajkot) and cotton processing mills in Rajkot.

ENGINEERING COURSES TAKEN

- **Math:** calculus, linear algebra, differential equations, data analysis and interpretation.
- **Computer science:** computer programming and utilization (C++ language)
- **Mechanical:** solid mechanics, thermodynamics

- **Electrical:** basic electrical engineering, introduction to digital electronics (minor course)
- **Other:** economics, energy engineering fundamentals, engineering metallurgy, electricity and magnetism, classical mechanics, chemistry.
- **Laboratory experience:** experimental and measurement lab, engineering drawing and design, mechanical workshop, chemistry and physics lab.

POSITIONS OF RESPONSIBILITY

- **Teaching Associate:**
 - Occupied the post of teaching associate under Professor Sudhir Ghorpade for the autumn semester (2011) for the freshman year's calculus course. (MA105)
- **Mentor:**
 - Hold the post of a mentor (academic guide to students) in Avanti Fellows, a non-profit organization of the IIT students which helps bright students from poor socio-economic backgrounds to study for IIT-JEE.
- **Mood Indigo, 2011**
 - Coordinator, Informals department: Co-organised MI Records (similar to Guinness records), Hogathon (timed eating contests) and 'How Sense-able Are you' (a competition in which we designed challenges based on the 5 senses i.e. taste, touch etc.)
- Held the post of **academic house captain** in my school (S.N. Kansagra, Rajkot) in 2004.

EXTRA ACTIVITIES

- **Yoga:** have competed in yoga competitions till the state level. The competitions are based on flexibility, balance and strength.
- **Adventure sports:** have done a 1 month basic mountaineering course conducted by Atal Bihari Vajpayee Institute of Mountaineering and Allied Sports, Manali in the summer of 2011 and attained the qualifying height of 15,000 feet above the sea level. Secured 'A' grade ('above average' grade) in the course. Have also done a trekking camp in the Himalayas conducted by Abhiyaan trekkers in the summer of 2002 and attained the height of 14,000 feet above the sea level.
- **NCC:** was a cadet in the National Cadet Corps in the academic year 2010-2011 and have secured the B-level (the college level) certificate.
- Current interests: game theory, quizzing, playing mafia and swimming. (freestyle, breast-stroke)

AWARDS AND ACHIEVEMENTS

- **Yoga:** stood 2nd, 1st and 3rd in the years 2003, 2004 and 2005 respectively in the district of Rajkot in yoga competitions.
- **Quizzing:** Won the silver, gold and bronze medals in the annual quizzing competitions in my school in 2003, 2004 and 2005 respectively. Also won a quiz competition at the Physical Research Laboratory, Ahmedabad in February, 2009.