



Nimish Mehta
Mechanical Engineering
Indian Institute of Technology, Bombay

09010012
UG Third Year (B.Tech.)
Male
DOB: 07/02/1991

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	8.67
Intermediate/+2	MPBSE	MPBSE	2008	84.44
Matriculation	MPBSE	MPBSE	2006	89.00

ACHIEVEMENTS

- **IIT-JEE (Joint Entrance Examination conducted by Govt.):** Qualified in 2009 and Secured an **AIR -144** among the **397,000** candidates appeared.
- **AIEEE (All India Engineering Entrance Examination conducted by Govt. of India):** Qualified in 2009 and ranked among **top 0.09%** of the **1000,000** (approx.) candidates appeared.
- Awarded **Institute Special Mention for Technical Activities** in the year 2010.
- Recipient of **MCM (Merit cum Means) Scholarship** on the basis of academic performance.

PROJECT ACTIVITIES

- **Summer Internship at Reliance Power Plant Dahanu (DTPS)** *May'11-july'11*
Dry flue Gas Losses
Guided by: Mr Vijay Dali, General Manager
 - Evaluated the percentage loss due to dry flue gas using the real time data.
 - Evaluated total efficiency of boiler unit using real time data.
 - Monitored the air-fuel ratio, Excess air level accordingly determining the location of O₂ sensor, stack gas temperature control theoretically.
- **Technovation: Currently working on the institute recommended project**
Book Keeping Bot. Insemester project *Autumn 2011*
 - Currently, aim of this project is to replace the late night issued books of library from the entrance to their corresponding shelf autonomously using **dead-reckoning** navigation system and laser following using **TSOP** as a corrective measurement. Optical scan of book's barcode is done by **Android** and **Arduino** interface.
- **IIT Bombay Racing-BAJA SAE INDIA 2012**
Data Acquisition (Dashboard) *Summer'11-Ongoing*
 - Currently building a data acquisition system for BAJA 2012.
 - Implemented an LCD interface for car speed, engine's Temperature, car acceleration and engine RPM.
 - Implemented wireless transmission of all data from car daq board to end user.
 - Real time plotting of wirelessly transmitted data.
- **Marketing Management Project-Course Project** *Spring 2010*
Guided by : Prof. Dinesh Sharma
 - Studied the market position of Microsoft by conducting SWOT, PESTAL and 4P analysis.
 - Suggested ways to maintain the **market share** by proper optimization and balanced portfolio management in **target markets**.

- **Mini Unique Identification System – Course Project** Autumn 2009
Guided by: **Prof. Deepak Phatak**, Department of CSE,IIT-Bombay
Worked as a team member in the consolidation part of **UID project**.
- **Carbon Nanotube & Water Filtration : Course project** Autumn 2009
Guided by: **Prof. G.V. Prabhugaokar**
This project is aimed at finding the applications of Nanotechnology (through Carbon Nanotubes) in Water filtration technology by extensive research on the properties and thus finding its appropriate implications in water treatment

PERSONAL PROJECT

LASER PONG:

- **V1.0 ECSP(Electronic club summer Project)** Summer 2010
Laser pong is a gaming gadgets a virtual(2D) version of Ping-Pong . Objective of this project was get to know microcontroller Programming and motor drivers
- **V2.0 Mentored by :Prof. R.K. Singh** Winter 2010
Version of this game was improved by including the stepper motion of projected Ball, sensors array integrated with multiplexer ic for forwarding the selected input, Wireless two way transmission of data, tilt and acceleration measurement using the two axis accelerometer with low pass filtering, which was exhibited in **TechFest'11**.

NEXUS-Navigate

- Successfully built an autonomous grid follower bot capable of finding the distinctive blocks and transport them to the preliminary point.
- **Placed 1st in western zone at TECHFEST 2010.**

SOLAR SPLASH

- Successfully built and exhibited a solar bot in **TECHFEST 2009**.

POSITIONS OF RESPONSIBILITY

- **Technical Secretary** of Hostel-7 of Strength 350 (2010-2011).
- **Core Group member** of **Technic, the IIT Bombay** Technical Club. (2010-11)and also **Technical Mentor** for around 8 students during the same period.

EXTRA CURRICULAR ACTIVITIES

- **NATIONAL SERVICE SCHEME(NSS):**
 - Played a key role in educating the Campus School(IIT-Bombay) children held by **Educational Outreach Dept.** under National Service Scheme.
 - Surveyed two villages held by **GRA (Group For Rural Activities)** under National Service Scheme.
- Awarded **certificate of proficiency** in C++ with **satisfactory** performance by **CE & QIP,IIT- Bombay**.
- Ranked **2nd** in my district in **MBD** Talent search exam.
- Participated in many tech competitions: F 1 race, line follower, Mechanical Design Challenge, Nexus(**TechFest**),Solarsplash(**TechFest**), CityMap (**Bits,Goa annual fest**).

RELEVANT COURSES

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|---|------------------------------------|
| • Computer Programming and Utilization. | • Data Analysis and Interpretation |
| • Marketing Management | • Electrical & Electronic Circuits |
| • Electronic Devices | • Digital Electronics |
| • Heat transfer | • Fluid Mechanics |

COMPUTER AND TECHNICAL PROFICIENCY

- **Operating Systems :** WINDOWS , LINUX
- **Programming/Scripting Languages:** Avr programming, C++ ,HTML,CSS,JavaScript.
- **Software/Electronic skill:** Matlab ,Solidworks, LTSpice, Eagle, Latex
Microcontroller 8051, AVR Atmel family,