



Tejas Naphade
Electrical Engineering
Indian Institute of Technology, Bombay
Specialization: Microelectronics

09D07013
UG Third Year(Dual Degree)
Male
DOB: 24/11/1991

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	9.58
Intermediate/+2	Central Board of Secondary Education	R.N. Podar School	2009	94.80
Matriculation	Council for Indian School Certificate Examination	Lilavatibai Podar Senior Secondary School	2007	97.43

Scholastic Achievements

- Secured **Department Rank 1** (at the end of four semesters in the batch of Microelectronics Dual Degree students).
- Awarded the **Institute Academic prize for the year 2010-2011** by IIT Bombay.
- Secured All India Rank **165** in IIT JEE 2009 amongst 384,000 candidates.
- Attained All India Rank **211** and State Rank **25** in AIEEE 2009 amongst 1 million candidates.
- Topped school and stood **2nd** in Mumbai in the tenth standard ICSE Board Exam with **97.43%**.
- Awarded General Proficiency prize in school for 3 consecutive years from 8th to 10th Standard.

Internships

Investigation of Copper Embedded Fiber Bragg Grating Sensors at Cryogenic Temperatures

Project Guide: Dr.Rajini Ramalingam, Scientist, Cryogenics Group, May-July 2011
Institute of Technical Physics, Karlsruhe Institute of Technology, Germany

- Learnt about the principles behind the fiber bragg grating sensor.
- Studied effects of metal coating on the sensitivity of fiber bragg grating sensors.
- Theoretically modelled the sensitivity change arising due to the effect of coating with copper and stycast as a function of both temperature and coating thickness.
- Fabricated the sensors and performed experiments to verify the theoretical predictions.

Projects

Implementation of shooting game using basic digital electronic components

Project Guide: Prof. Udayan Ganguly, IIT-Bombay Feb-April 2011

- Successfully designed and implemented a game “Shoot the Ducks”, similar to the popular Nintendo game Duck Hunt.
- Utilized digital electronics (555 timer, shift registers, ROMs, Counters, Multiplexers, LED display) to create various blocks of the circuit.
- A successful software simulation was also done using Verilog programming.

Develop a Unique Identification system for IIT-B Campus

Project Guide: Prof. Deepak Phatak, IIT-Bombay Oct-Nov 2009

- Implemented the registration part of Unique ID project for IIT Bombay campus.
- Developed programs using C++ to register, assign a unique ID, check for forgery and read and store fingerprints of students.

Design and implementation of a glove controller for an RC Helicopter *May-July 2010*

- Utilized an accelerometer and a microcontroller to develop a glove controller for an RC helicopter.
- Successfully interfaced the original rf circuitry to the made glove controller.
- Worked as a part of a four member team during the summer vacation under the Electronics Club of IIT Bombay.

Courses *(will be completed by May 2012)*

Electrical (Major) Courses

- | | |
|---|--|
| • Electronic Devices | • Communication Systems |
| • Network Theory | • EM waves |
| • Signals and Systems | • Compound Semiconductor Materials and Devices |
| • Analog Circuits | • Control Systems |
| • Digital Systems | • Digital Signal Processing |
| • Electrical Machines and Power Electronics | • Physics of MOS transistors |
| • Microprocessors | |

Management (Minor) Courses

- | | |
|-------------------------|--------------------------|
| • Marketing Management | • Accounting and Finance |
| • Operations Management | |

Skills

- **Programming languages:** C++, Verilog, VHDL, Assembly language.
- **Web Development:** HTML
- **Software:** Matlab, LT Spice, Eagle, Latex, Ansys, Scilab.
- **Operating systems:** Windows, Linux
- **Authority Skills:** Microsoft Office
- **Languages:** English, Hindi, Marathi

Positions of Responsibility

- **Coordinator**, Mood Indigo (India's Largest Cultural College Festival) 2010 for the Informals department. Conceptualized and conducted **Mood Indigo's Most Wanted** (Personality Hunt) and the **Treasure Hunt**.
- Worked as an **Organizer** for **Aagomani** (Electrical Department festival) 2009
- Was **House Captain** at school (2006-2007).
- Appointed Times of India NIE School Reporter(2005-2006).

Extra-Curricular Activities

- Playing Guitar. Achieved **Distinction** in Grade 2 Theory of Music examination conducted by the **Trinity College of London** in 2003
- Won **Spy Games** in 2010 an institute literary event themed on deciphering codes.
- Made a **remote controlled mini-F1 car** in the racing car competition organised by TechniC, IIT Bombay.
- Won many competitions in mono-acting, quizzing, extempore and essay writing at school level.