Abhimanyu Dhariwal
Energy Systems Engineering
Indian Institute of Technology, Bombay

10D170014
UG Second Year
Male
DOB: 02/11/1992

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	9.44
Intermediate/+2	HSC	Sathaye Junior College	2010	92.67
Matriculation	ICSE	Lokhandwala Foundation School	2008	96.29

Scholastic Achievements

- Ranked **1st** in the Department of Energy Science and Engineering, IIT-Bombay. *(2010-present)*
- Secured an All India Rank of **414** in IIT-JEE out of **0.45 million** students**.** *(2010)*
- Secured an All India Rank of **274** in AIEEE out of **1 million** students**.** *(2010)*
- Top **1% nation** in National Standard Examination in Astronomy (NSEA) Sr. - qualified for **Indian National Astronomy Olympiad (INAO)** *(2010)*
- Top **1% nation** in National Standard Examination in Chemistry (NSEC)   - qualified for **Indian National Chemistry Olympiad (INChO)** *(2010)*
- Top **1% state** in National Standard Examination in Physics (NSEP) *(2010)*
- **ASSET** (Assessment of Scholastic Skills through Educational Testing) **Winter 2005** –
  Awarded with a book prize for being one of the **top 10** students, **overall**, in class 8 in India.

Academic Projects

- **The Greener Bicycle** *(January 2011 – April 2011)*
  - Under guidance of *Prof. Rangan Banerjee*
  - Innovated and fabricated a device for a bicycle (in a team of two), comprising of a movable system of a wheel and motor assembly, operated by a gear mechanism, which can be used to **generate electricity while braking**.
  - Electricity generated was used to power a mobile charger or brake lights.
  - This project won the *first* prize in the competition "Fission Impossible" of **Malhar**-2011 (*August*) (College fest of St.Xavier's College) in which the projects had to be innovative, creative models or designs that would help *in progress & survival of humans in future*.
  - Improved the design of the device for the competition 'EARTH' of **Techfest-**2012 (Science and Technology festival of IIT-Bombay) and qualified for its finals. *(January 2012)*

- **Typing Tutor** *(March 2011)*
  - Under guidance of *Prof. Rushikesh Joshi*
  - Programmed an interactive visual typing tutor using C++ and *FLTK* graphics which would test the user's typing skills over a timed session.

Summer Project

- **Light following and obstacle avoiding robot** *(June 2011)*
  - Under guidance of *Electronics Club* of IIT Bombay
  - Devised an autonomous robot during the summer break which involved usage of light sensors, distance sensors, micro-controllers and *Arduino* coding.
  - The robot *moves in direction of light* while *at the same time avoids hitting obstacles* in its path.
  - The project was one of the 25 odd completed projects and was completely done by a group of four 1st year students under an assigned mentor.

Co-curricular Activities

- Designed and made a **line-following maze solving** robot using **white-line sensors** for the regional round of a national competition called iNexus. (*September 2011*)
- Visited **Tata Power Plant** in Mumbai for industrial visit and prepared a working report. (*March 2011*)
- Demonstrated **solar cooking** along with batch mates using different types of solar cookers, namely Box type and Parabolic dish and prepared a detailed report for the same. (*February 2011*)

Important Courses Taken

- Basic Electrical Engineering, Thermodynamics and Energy Conversion**,** Energy Engineering Fundamentals.
- Economics, Data Analysis and Interpretation, Computer Programming and Utilization, Environmental Studies (scientific and economic perspectives), Psychology
- Electronics, Power electronics and machines, Material science for energy applications. (*to be completed by April 2012*)
- Discrete Structures, Data Structures and Algorithms as *minor* courses in Computer Science and Engineering**.**

Computer Proficiency

- **C++, Java** programming languages
- **SEQUEL** Electronic Circuit Simulator, **LabVIEW**
- **MATLAB** computing software

Positions of Responsibility

- **Hostel Mess Secretary** (*April 2011-present*)
  - ➢ Currently holding this post of Hostel 3 which involves insuring smooth functioning of the mess that caters to over 500 students.
  - ➢ **Pioneered** the concept of providing menu information and collecting feedback on a real time basis using online and SMS channels
- **Organizer , Mood Indigo 2010**
- **Co-ordinator, Mood Indigo 2011**
  - ➢ Responsible for ideation and execution of mega events like '**How sense-able are you?**' and '**Hog-a-thon'** which were attended by over 150 people.

Extra-curricular Activities

- Junior Member of the **ShARE-IITB** Chapter under the Energy Sector and currently making a presentation on 'Hybrid Cars in India'. ShARE is an *international student organisation* which connects talented students to corporate and social leaders to discuss world economic issues. (*September 2011-present)*
- Won the preliminary round of the **Bournvita Quiz Contest** (General knowledge) in a team of 2. (*2004-05)*
- Qualified for the TV rounds of **India's Child Genius** (on **Star World**). (episode #15 August 22nd,*2004)*
- Completed a course in playing synthesizer (piano) and passed level **basic I** exam with 75% final marks. (*2002)*

Additional Points

- Completed pre-primary, primary and secondary education in **7 schools** over **3 countries** – Thailand, Indonesia and India.
- Keen interests in Formula One, adventure sports, numismatics, philately.
- Plays sports like lawn tennis, badminton, swimming regularly.