



Pranav Shetty
Energy Systems Engineering
Indian Institute of Technology, Bombay
Specialization: Energy Systems Engineering

10D170007
UG Third Year(Dual Degree)
Male
DOB: 27/04/1992

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	9.20
Intermediate/+2	HSC	Sathaye College,Mumbai	2010	86.67
Matriculation	ICSE	Smt. Sulochanadevi Singhanian School	2008	95.43

Scholastic achievements

- Currently ranked 3rd in the Energy Department 2012
- Awarded **Certificate of Merit and Gold medal** at the Indian National Chemistry Olympiad 2010
- Secured **All India Rank 10** in the National Science Talent Search Examination 2010
- Was selected to attend the training camp for the **International Astronomy Olympiad** 2007
- Secured **All India Rank 645** in the IIT Joint Entrance Exam out of 450,000 applicants 2010
- Placed in **top 1%** of the students appearing in the Indian National Physics Olympiad 2010
- Awarded the **Gold Medal** at the Homi Bhabha Young Scientist Examination 2007
- Secured **State Rank 17** in the Maharashtra Talent Search Exam 2006
- Secured **All India Rank 11** in the All India Open Mathematics Scholarship Exam 2006
- Awarded **Gold Medal** in the Pradnya Maths Scholarship Exam, one out of 50 students across the state 2006

Technical Activities

- **Power generation from braking in bicycle:** Course Project Feb-April '11
 - Successfully made a device which generates electricity during braking in a bicycle to **charge a phone**
- **Light & Obstacle detecting bot:** Electronics Club Summer Project May-June '11
 - Made a bot which detects light and follows it, while at the same time avoiding any obstacles in its path
 - Work involved designing an algorithm to handle inputs from distance and light sensors and write code to process the inputs in a microcontroller
- **Room Lighting Control:** Course Project March-April '12
 - Implemented a system which maintains constant lighting conditions in a room with change in outside lighting condition and also turns off the lights if the room is empty
 - Work involved designing multiple circuit boards to meet a certain problem statement, designing it in EAGLE and then getting it printed

Internships

- **Reliance Energy Ltd. DTPS, Dahanu Thermal Power Station**
 - Completed an energy and safety audit of boiler unit 1 in the plant
 - Recommended certain measures to improve efficiency in the air compression unit

Positions of Responsibility

- **Convenor, Literary Arts Club of IIT Bombay** April '11-March '12
 - **Helped organize** several workshops and sessions introducing students to the various genres of Literary Arts
- **Mood Indigo 2011- Coordinator, Team Competitions** August-December '11
 - Played a key role in organising a quizzing festival, 'Omniscience', as part of Mood Indigo, the cultural festival of IIT Bombay. This is one of the **biggest quizzing festivals** at the college level in India
- **Department Academic Mentor Programme(DAMP)** August '12-present
 - Responsible for mentoring academically backward students and helping them with their coursework and also part of a **team** which **spreads awareness** about the department among freshmen and sophomores

Software Skills

- **Operating Systems:-**Windows, GNU-Linux, Mac OS
- **Programming Languages:-**C++,Java(IDE-BlueJ)
- **Web/Scripting:-**Python, HTML
- **Tools:-**SEQUEL, LabView, Simulink, Matlab, EAGLE
- Proficient in Arduino Microcontroller coding

Courses taken

- **Energy:-** Material Science for Energy Applications, Introduction to Renewable Energy Technology*,Introduction to Energy Engg, Energy Systems(L), Thin Film Physics and Technology*
- **Computer Science:-** Computer Programming and Utilization ,Discrete Structures, Data Structures and Algorithms, Operating Systems*
- **Electrical:-** Electronics, Power Electronics, Basic Electrical Engineering(L),Electric Machines and Power(L), Electronics(L), Basic Electrical Engineering
- **Mechanical:-** Equipment Design and Control*, Fluid Mechanics*, Thermal and Fluid Engineering(L)*, Thermodynamics, Heat and Mass Transfer*
- **Mathematics:-** Calculus, Linear Algebra, Differential Equations, Numerical Analysis, Data Analysis and Interpretation
- **Other Courses:-** Introduction to Economics, Psychology, Electricity & Magnetism, Chemistry, Experimentation and Measurement(L), Mechanical Workshop(L), Engineering Graphics(L)

Courses marked * will be completed in November 2012.

Courses marked L are Lab courses.

Extra-curricular activities

- An active quizzier having taken part and won in several quizzes .Some of them are:-
 - **Represented** India in the **Brain World Cup 2012** held in Tokyo, Japan which saw participation from 16 universities across 11 countries. July '12
 - Won the **All-India Sweden India Nobel** memorial quiz organized by the Embassy of Sweden and was awarded a fully sponsored trip to Sweden to interact with industry. May '12
 - Won the **T.I.M.E. Aqua Regia** All India Science Quiz .This quiz is mentioned in the **Limca Book of Records** for being the Largest Quiz in India (No. of participants) Dec '07
- Won the **1st place** in a competition "Fission Impossible", (part of Malhar, college fest of St. Xavier's college) to design devices which use alternative energy. A more advanced prototype **qualified to the finals** of "**Earth**"(part of Techfest, technical fest of IIT Bombay), a competition which aims to promote sustainable solutions to environmental problems 2011-12
- Currently studying a basic course in German Aug '12-present