



Anand Agarwalla  
Energy Science & Engineering  
Indian Institute of Technology, Bombay

11D170024  
UG Second Year  
Male  
DOB: 13-12-1991

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2013	
Intermediate/+2	CBSE	Vidya Mandir Senior Secondary School	2010	
Matriculation	ICSE	Vikash Convent School	2008	

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#### ACADEMIC ACHIEVEMENTS

- Achieved an All India Rank of **1212** in **IIT Joint Entrance Examination-2011** out of around **500,000** students.
- Achieved an All India Rank of **5** in the open category in **NSTSE** in the year 2006.
- Achieved the highest percentage in the block in 10<sup>th</sup> board ICSE.
- Secured All India Rank of 15 in **Odisha Joint Entrance Exam**.
- Scored All India Rank 31 in KIIT entrance examination.

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#### AREAS OF INTEREST

- Statistics and Probability
- Electrical and Electronic circuit
- Management and Finance
- Software Development

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#### COMPUTER PROFICIENCY

**Programming Skills** – C++, *BlueJ*

**Web** – Html, CSS (elementary)

**Software** – *Matlab* (elementary), **SEQUEL** Electronic Circuit Simulator, *MSOffice*, Adobe Photoshop (elementary)

**Operating Systems** – *Windows, Linux*.

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#### PROJECTS AND WORK

- **Made a graph plotter/paper cutter for the Institute Summer Technical Project** conducted by IIT Bombay.  
A function given as an input can be plotted using a Arduino micro-controller.
- **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.

- **Developed a code for the famous game SUDOKU (9\*9) with graphic interface** in C++ by providing a highly user-friendly GUI.  
*Guide: Prof. Deepak B. Phatak (CSE Department, IIT Bombay)*
- **Built a solar based thermo-couple using Peltier element as a department project** to generate electricity. Water was cooled and heated simultaneously in different containers using solar energy and the difference in temperature was applied across the peltier element having electricity output.  
*Guide: Prof. Rangan Banerjee (Dean R & D, Energy department)*
- **Analysed the Tata Power Plant power production** and prepared a report as an industrial visit.  
*Guide: Prof. Rangan Banerjee (Dean R & D, Energy department)*
- **Built an experimental set-up to extract biofuel from jatropha seeds as a science fair project** at district level in the year 2006
- **Built a line following robot for an institute level competition for freshmen.**  
The robot used an **ATMEGA microcontroller** on an Arduino board onto which a **PID algorithm** was ported to achieve smooth line following.

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## COURSES UNDERTAKEN

Computer Programming and Utilization	Linear Algebra and Differential Equations
Electricity and magnetism	Calculus
Power Electronics and Machines *	Numerical Analysis*
Electronics *	Basics of electrical engineering*
Data Analysis and Interpretation	Thermodynamics and energy conversion
Environmental Studies	Experimental and Measurement lab
Basics of Micro and Macro Economics	Sociology

*\* - To be completed by April 2013*

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## POSITIONS OF RESPONSIBILITY

- Was the cultural secretary of Vikash Convent School from 2006-2007.
- Was the **captain** of one of four houses from 2006-2007 in Vikash Convent School.
- Active member of the Dramatics Club of IIT Bombay **“Fourth Wall”**.
- **TIFAC** (Technology Information, Forecasting & Assessment Council) coordinator.

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## EXTRA-CURRICULAR ACHIEVEMENTS

- Played cricket at district level in the year 2006.
- Played Kho-Kho at district level in the year 2006.
- Directed the winning 4 out of 5 videos in the video-making competition at freshiezza 2011.

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## Additional Points

- Keen interest in writing, acting, directing, playing guitar and dancing.
- Highly interested in developing some alternative source of energy.