



**Siddharth Bulia**  
**Computer Science & Engineering**  
**Indian Institute of Technology Bombay**

**130050012**  
**UG Second Year**  
**Male**  
**DOB: 2-Oct-1995**

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2015	8.79
Intermediate/+2	CBSE	Aklank Public School, Kota	2013	92.00
Matriculation	CBSE	Shree Mahesh Public School, Bhilwara	2011	10.00

## ACADEMICS

- Secured **All India Rank 38** in **JEE-Advanced-2013** out of **1.5 lakh** candidates
- Scored **430/450** in **BITSAT-2013**, a National level Entrance Exam for **BITS**
- Awarded the prestigious **Kishore Vaigyanik Protsahan Yojana** Fellowship by the Department of Science and Technology, Govt. of India, 2013
- Selected for **Special Class Railway Apprentice (SCRA)** Interview
- Secured **All Rajasthan State Rank 1** in **Macmillan Math Exam-2007** conducted by **University of New South Wales, Australia**
- Secured **All India Rank 101** in **NSTSE-2013** conducted by Unified Council
- Secured **5th** rank in **RPET-2013**, a Rajasthan State level Entrance Exam for State Engineering Colleges
- Pursuing minor in **Industrial Design Centre (IDC)**

## OLYMPIADS

- Represented **India** and was awarded **Honourable Mention** in **14th Asian Physics Olympiad-2013** held in Indonesia, amongst students from 20 participating countries
- Awarded **Gold medal** in **Indian National Physics Olympiad-2013** for being among top 35 students
- Awarded **Merit Certificate** in **National Standard Examination in Astronomy-2013** for being among Top 300 students across the country
- Awarded **Merit Certificate** in **National Standard Examination in Chemistry-2013** for being among Top 300 students across the Rajasthan State

## PROJECTS

- **Data Analysis and Prediction** (Aug'14-Nov'14)  
*Guide: Prof. Ganesh Ramakrishnan*
  - Statistically analysed a given sentence and identified the relation being described in it
  - Extracted relations between countries and numbers from corpus using specific indicators learnt from the given **knowledge base**
  - Used statistical concepts of **normal distribution** and **hypothesis testing** to assign confidence code to these relations
- **Seat Allocation** (Aug'14-Nov'14)  
*Guide: Prof. Sharat Chandran*
  - Implemented a modified **Gale Shapley Algorithm** for College Admissions using Java
  - Incorporated multiple ranklists, reservation, defense and foreign quota and dereservation of seats
  - Developed a **Django** based web application for candidates to fill their details and preferences.
  - Included features like login process, branch cutoff analysis, etc.
- **Rube Goldberg Machine** (Aug'14-Nov'14)  
*Guide: Prof. Sharat Chandran*
  - Developing a **Rube Goldberg machine** which aims to snooze an Alarm using **Physics Simulation Engine, Box2D** in C++ language
  - Simulated many Mechanical Components like **Newton's Cradle, Dominos, etc.** in the machine.

- **Tetris** (Jan'14-Apr'14)  
*Guide: Prof. Rushikesh K Joshi*
  - Developed the popular **Tetris** Game using the **FLTK** Library of **C++**
  - Implemented **Event handling** and **Callback functions** to generate blocks at regular intervals
  - Implementation is done in **Object-oriented programming** genre , keeping in mind the ideals of computing such as encapsulation, inheritance etc.
- **Marks Management System for professors** (Aug'13-Dec'13)  
*Guide: Prof. Supratim Biswas*
  - Developed a **Marks Management System** for professors using file handling in C++
  - Provided the ability to create **password protected accounts** for professors and teaching assistants
  - Used **hashtables** to save passwords and marks of students in a secure fashion
  - Used **Simplecpp** graphics to give Statistical evaluation of marks by pie-charts and frequency polygons
  - Provided a **communication interface** between course TAs and instructors

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## TECHNICAL STRENGTHS

<b>Computer Languages</b>	C, C++, Python, Java, Prolog, Bash
<b>Web Development</b>	HTML, CSS, JavaScript, PHP, django
<b>Softwares</b>	L <sup>A</sup> T <sub>E</sub> X, Scilab, MIT-Scratch, Github, Doxygen

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## KEY COURSES TAKEN

Calculus	Linear Algebra
Differential Equations	Discrete Structures*
Computer Programming and Utilization	Abstractions and Paradigms+ Lab
Data Structures and Algorithms*	Software Systems Lab*
Data Analysis and Interpretation*	Digital Design Logic + Lab**
Design and Analysis of Algorithms**	Logic for Computers**
Computer Networks + Lab**	Introduction to linux (Online course by edX)*
Introduction to Electrical and Electronic Circuits*	Modern Physics
Electromagnetism	Chemistry
Economics**	Introduction To Design:Case Studies*

\* to be completed by November 2014

\*\* to be completed by April 2015

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## POSITIONS OF RESPONSIBILITY

### Hostel Technical Secretary, IIT Bombay

- Working in a team of 3 members for promoting **Technical activities** in Hostel 4
- Responsible for planning and execution of entries for **Inter Hostel Technical Competitions**

### Coordinator, Mood Indigo - IIT Bombay's Cultural Festival

- Working in **Hospitality Department** to provide better accomodation facilities to participants and visitors at Mood Indigo-2014

### Organiser, Techfest - IIT Bombay's Technical Festival

- Helped in conducting an **Augmented Reality Workshop** at Techfest-2014

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## EXTRACURRICULARS

- Successfully completed **Basic Mountaineering Course**.
- Gave opening performance in **Gyration** (Dance General Championship at IIT Bombay)
- Worked at **Asha For Education**, a NGO aimed to provide education facilities to underprivileged children as a part of one year NSS program at IIT Bombay
- Successfully made a **Hexa-Bot** in a session conducted by STAB, IIT Bombay
- Participated in **Sophie Dance League** by Insync Dance Club, IIT Bombay
- Participated in **Line Follower, XLR8-Bot Racing Competitions** by STAB, IIT Bombay
- Participated in **Performing Arts Festival** representing Hostel 4, IIT Bombay
- Represented school in inter-school **Quiz** competitions and **Badminton** Tournaments