



**Rishabh Rawat**  
**Electrical Engineering**  
**Indian Institute of Technology Bombay**  
**Specialization: Microelectronics**

**120020087**  
**UG Second Year**  
**Male**  
**DOB: 16/07/1994**

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2014	9.11

## **SCHOLASTIC ACHIEVEMENTS**

- Achieved an **All India Rank of 1055** in **IIT Joint Entrance Exam** ('12)
- Awarded **Branch change** for Exceptional Academic Performance (July - '13)
- Awarded **Certificate of Merit** from **CBSE** for securing **299 of 300** in **PCM** in **Class XII** ('12)
- Awarded **AP (Advanced Performer)** in **CL152** for being in **top 3%** (May - '13)
- Awarded **Gold Medal** and **cash prize** for **Achieving AIR 17** in **NSO** ('06)
- Awarded **Gold and Silver Medals** in Individual Contest in **International Young Mathematician's convention** in successive years ('08,'10)

## **PROJECTS UNDERTAKEN**

### **PRATHAM - IITB 1<sup>ST</sup> STUDENT SATELLITE INITIATIVE** (MARCH '13-PRESENT)

- Performed **space grade tests** on satellite peripherals including **GPS** and **Magnetometer**
- Developed and verified **Onboard software** for effective functioning of satellite
- Developed and implemented a **real time Onboard In Loop Simulator (OILS)** to simulate the actual functioning of satellite software in space environment

### **PARINAT - IITB HUMANOID PROJECT** (OCTOBER '13-PRESENT)

- Designed **servo controllers** and implemented **wire routing model**, for complete motion control
- Devised an improved **microcontroller framework** to support increased processing load

### **WINTER INTERN AT GAMEYARD STUDIOS** (DECEMBER '13)

- Designed and Developed **Market standard Android games** using **UNITY-3D** platform
- Conceptualized and Created **animation** sequences and **3d-models** on **Blender** Platform

### **SUMMER INTERN AT BIOSYNTH** (MAY '13-JUNE '13)

- Developed the **Acid Oil Protocol** and implemented **WVO Protocol** for large scale production of **Biodiesel** from waste oils

### **STUDENT SATELLITE SOCIETY OF INDIA** (AUGUST '13-PRESENT)

- Co-Founded the Student Satellite Society of India** (an NGO) with the motivation to promote the learning of Space Technology in India

## **OTHER TECHNICAL ACTIVITIES**

- Developed advanced **line and curve detection** and **object tracking** algorithms in **Image Processing** using **OPEN-CV** libraries (September '12)
- Designed and Fabricated a **Projectile shooter** as part of **AUV** competition (October '12)
- Designed and built a **wireless four wheeled bot** for **XLR8** and an **autonomous line following bot** for line follower competition (October '12)
- Developed an **OPEN-GL** and **AI based computer game** for **CS-101** project (March '12)

## **EXTRACURRICULAR ACTIVITIES**

- Undertook **NSO swimming** and **Successfully completed 12 hour Swimmathon** organized by IIT Bombay (March '12)
- Undertook 26-days **Basic Mountaineering Course** by **Atal Bihari Vajpayee Institute of Mountaineering and Allied Sports** (May '12-July '12)
- Completed **68 km, 6-day Amarnath Trek** with max **height gain of 13000 ft** ('07)