



Kunal Phalak
Electrical Engineering
Indian Institute of Technology, Bombay
Specialization: Communication & Signal Processing

11D070023
UG Second Year
Male
DOB: 14.08.1993

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	8.49
Intermediate/+2	Maharashtra Board	SNBP Junior College	2011	89.17
Matriculation	Maharashtra Board	Priyadarshani High School	2009	91.84

Awards & Recognition

- Awarded **Institute Special Mention**, Technical Activities given to 12 students out of 4000 students in IIT Bombay. 2011-12
- Received the prestigious **Kishore Vaigyanik Protsahan Yojana (Young Scientist Initiative)** fellowship awarded by **Indian Institute of Science, Bangalore**. 2010-11
- Awarded **The Certificate of Excellence** for active contribution by National Service Scheme among the top 12 students in NSS at IIT Bombay. 2011-12
- Secured a Rank of **15** out of about 50,000 students in **Maharashtra State Talent Search Exam** 2008-09, 2007-08
- Secured AIR of **149** in **National Science Olympiad** 2008
- Secured AIR of **166** in **National Cyber Olympiad** 2008
- Secured AIR of **149** in **All India Open Mathematics** 2008
- Secured **Distinction** in International Assessment of India School by **University of South Wales** 2008

Projects

- Local Positioning System** (*Institute Summer Technical Project*) (Summer 2012)
 - Successfully built a "Real Time Local Positioning System" i.e. to detect the coordinates of the robot in a local arena using arena using Laser Diodes, Magnetometer and Light Dependent Resistors based on the concept of triangulation.
 - And hence show the path being traversed by it on Graphical Interface on the laptop.
 - The model can be developed into 3D positioning system using Radio Frequency sensors.*
 - The project was showcased as one of the flagships projects in *the Annual Technical Exhibition 2012* and *UG Research Symposium 2012*.
- Junior Design Engineer** (Electronics) as part of **IIT Bombay Racing Team** for Formula Student UK 2013 for the Electric car **Evo2**. (July - Till date)
 - As a part of present team working under *Data Acquisition Subsystem and Instrumentation* which involves data logging for car, testing, tuning & using different sensors, Telemetry and implementation.
 - It involves ARM architecture based microcontrollers and communication using **CAN** protocol and **Wi-Fi**
- Devil Dozer** (January 2012)
 - Built a manual robot with control to pick-place balls at Robotics Competition at Techfest, IIT Bombay Annual Technical Fest 2012 and was the only IIT Bombay team in top 12.
 - Responsible for the designing and on arena operation of robot.

Internship

- Evo1 India's first Electric Race Car for Formula Student UK, Silverstone Circuit** (IIT Bombay Racing Team) : Summer 2012
 - Designed circuits using EAGLE and tested them using LT Spice (Circuit Simulation Software) as a part of the *Low Voltage Safety Circuitry* for Evo1.

Technical Excellence

- **Mentored** First Year Undergraduate students for Radio Controlled Car making Competition held by Robotics Club IIT Bombay
- Secured **1st Position** in **Arduino** (MicroController) Coding Competition organized by Electronics Club IIT Bombay
- Secured **1st Position** in TechOne (Radio Controlled Car making competition) organized by Robotics Club IIT Bombay
- Secured **2nd Position** in Line Follower Bot Competition organized by Electronics Club, IIT Bombay
- Secured **2nd Position** in Electronics Circuit Design Competition organized by Electronics Club, IIT Bombay

Technical Skills

- Coding : C/C++,HTML, Arduino,Processing(Electronic Sketchbook).
- Others : EAGLE, Matlab, LT Spice (Circuit Simulation), Photoshop.

Positions of Responsibility

- **Team Member Teach For India-IIT Bombay Chapter** : TFI IIT Bombay is a hand of Teach For India serving as a liaison between TFI and IIT Bombay.
 - Part of team responsible to identify and recruit high-potential students from our campus by creating awareness and organizing various events for them. (2012-13)
- **NSS (National Service Scheme) Coordinator**: Part of team responsible for successful organization and conceptualization of events for freshman and in the Institute in general. (2012-13)
- **Entrepreneurship Cell and Club Coordinator** (Events department) : Conceptualize, organize various events to encourage students to foray into the field of innovation and business. (July-Till date)
- **Organizer Mood Indigo (Informals and Competitions)** : Part of team responsible for organization and publicity of various events like CID Gameshow ,Cooking Competition etc. (2011)

Additional

- Taking an Embassy promoted **German Language Course**. (Will be completed in Spring 2013)
- Undertaking a minor course in **Systems and Control** engineering.
- Completed Summer School Course of Introduction to **Marketing Management** in *Shailesh .J. Mehta School of Management* (2012)
- Participated in Dance Competition in Freshizza (Largest cultural event for freshmen). (2011)
- Production Support to logistics of *Performing Arts Festival* . (2012)

Interests : Reading ,Music ,Travelling, Philosophy and making friends