

Awards & Recognition

- Secured **AIR 297(top 0.06%)** in **IIT JEE 2011** among 4,60,000 students.
- Nominated for the prestigious fellowship of **Kishore Vaigyanik Protsahan Yojana** (Young Scientist Initiative) awarded by **Indian Institute of Science, Bangalore** in **2011**.
- Secured **AIR 689(top 0.06%)** in **AIEEE 2011** among 10,50,000 students.
- Currently pursuing a minor in **Systems and Controls**.

Internships

IITB Racing

[May'12-June'12]

Under Prof Amarnath

- Designed logic circuits (for safety) using Eagle and tested them using LT Spice as a part of the International Competition **FSAE 2012** (Formula SAE conducted by Society of Automotive Engineers).

Lazy8Games

[December'12]

- Delivered lectures of Android Application Development to students in outside colleges as part of the winter internship program of Lazy8Games.

Technical Projects

IIT Bombay Racing Team

[May'12 - Ongoing]

Junior Designer Engineer , Electronics

- Currently working towards designing and manufacturing of **Electric Formula One Car** for **Formula Student UK 2013**.
- Working Under the **LV Safety Subsystem** which involves designing and testing **Low Voltage** Electronic circuits for the safety of the car.
- Currently designing all the boards of **LV Safety Circuits** in eagle and testing them.

Local Positioning System

[May'12-June'12]

Institute Technical Summer Project

- Successfully built a **Real Time Local Positioning System** , to detect the coordinates of the bot in a local arena; show the path being traversed by it on a Graphical Interface on the laptop.
- Showcased as one of the flagship projects in the **Annual Technical Exhibition 2012** and **UG Research Symposium 2012**.

Tum Tum Tracker

[Oct'12-Ongoing]

- Working as the leading **Circuit Designer** of this **Technovation** project which includes building a system which shows the position of every bus inside the institute using GPS.
- Also designed the circuit for communication between different buses.
- Designed the **Data Acquisition System** for the bus and also the **Dashboard** for the interface with the driver.

Emergency Cell Phone Charger

[August'12]

- Designed a device which can charge an **Iphone** using **AA** batteries.
- Made the Eagle designs and tested it using LTSpice.

Technical Skills

- Coding: C/C++, HTML, Arduino, Processing, CSS, Javascript, Java, PHP, Python, Android, Verilog
- Microcontroller: PIC 18 Family, 8051.
- Softwares: Eagle, Scilab, OpenCV, Lab View, LTSpice, Visual Studio, Dreamweaver, Logisim, Xilinx
- Operating Systems: Windows, Linux

Other Projects

Android Applications

- Login App with Database Access.
- Google Maps App.
- 2D Graphics App with rotating feature.
- Voice Recognition App
- An editor like Notepad.

Web Page

- www.ee.iitb.ac.in/~lalitkumar

Extra Curricular Activities

- Mentored over **50** First Year Undergraduate students for XLR8 held by Robotics Club ,IIT Bombay
- Secured **1st** Position in **TechOne (RC car making competition)**
- Secured **2nd** Position in **Line Follower Robot Competition**
- Secured **2nd** Position in **Electronics Circuit Design Competition**
- Secured **10th** Position in **Devil Dozer, Techfest** among **100** teams from all over India
- Swum continuously for 6 hours in **Swimathon** held in April'12.
- Was part of the team of IIT Bombay which broke the **Guinness World Record** of maximum number of people solving Rubiks Cube simultaneously.
- Participated in the Viking Football League which is the annual Football League of Hostel 6.

Position of Responsibility

- **Coordinator, Electronics Club of IIT Bombay:**
 - Involved in organizing and executing electronics related competitions.
 - Delivered lectures to over **300** First Year Undergraduate students for XLR8 held by Robotics Club, IIT Bombay.