KHUSHAL KHARADE   10D070023

Electrical Engineering   **UG Third Year(Dual Degree)**

Indian Institute of Technology, Bombay   **Male**

Specialization: Communication & Signal Processing **DOB: 29/11/1992**

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	7.27

PROJECTS UNDERTAKEN:

REPEATERS   Institute Summer Project [May18th 2012-Ongoing]

Guide: Prof. Girish Kumar

- Designed the serial port, **UM232R,** PCB using **EAGLE,** which acts as an interface between PC and the board. Studied the **RFMD's RF2051** Evaluation board and designed the identical evaluation board, using **EAGLE**, to implement Repeater application.
- Currently trying to program the RF2051 using a microcontroller to avoid the need of PC. The Final product will be able to increase the strength of radio signals like mobile signals.

CALCULATOR   Academic project [Mar 2012-April2012]

Guide: Prof. M.B.Patil

- It included interfacing of **FPGA** DE0 nano board with Hex-pad and LCD using the code written in **VERILOG**, compiling and testing in Altera's Quartus software. Initial testing was done on CPLD board developed in the lab.

FM TRANSMITTER   Electronics club summer project [May2011]

- Implemented a circuit on a PCB to transmit the audio signals over a range of frequencies (88MHz-108MHz).The transmitter was able to be heard on the mobile FM receiver on 30metres.

MICRO-MOUSE   Academic project [Oct 2010]

.Guide: Prof. D.B.Phatak

- Developed the program, based on Bellman-Flooding algorithm, using **C++** to solve the maze.
- Used EzWindows to construct GUI interfacing maze generating part and maze solving part.

SOFTWARE PROFICIENCY:

- Programming Languages: C, C++, basic PHP, Python, VERILOG HDL.
- Software packages: EAGLE, SciLab, MATLAB, Simulink, LTspice, LabView, Keil tool.
- Microcontrollers: Atmel's Atmega328, Atmel's 89c51, Intel's 8085uP.
- Operating Systems: Windows XP/2007/2008, Linux-Ubuntu.
- Proficient in Microsoft office, LaTeX.

SCHOLASTIC ACHIEVEMENTS:

- Awarded the **IITB Heritage Fund** Scholarship for the year 2011.
- Among the **top 0.5 %** in IIT JEE (2010) about 480,000 students appeared.
- Among the state wise **top 1%** in Indian National Chemistry Olympiad (2009-10).
- Awarded by the prestigious **National Talent Search** Examination **scholarship** (**NTSE 2008**). The scholarship is awarded to about 1000 scholars in the country.
- **1st rank** on district level in Maharashtra talent search exam (MTSE 2006).

POSITIONS OF RESPONSIBILITY:

- Worked as **Organizer** under the Hospitality Team in **Mood Indigo** 2010, Asia's largest cultural festival hosted by IITBombay. Managed the crowd for the events like Rappelling and ATV riding.
- Worked as **Organizer** of 'Ozone' group in **Techfest** 2011, India's biggest technical festival hosted by IITBombay. Managed the treasure hunt event during the fest.
- **Mentor**ed a team of juniors aimed at making **4Track-Bot** under **Institute technical summer project** (2012). Addressing their technical issues regarding motors and micro-controller coding.