



PROJECTS/ASSIGNMENTS

M.Tech PROJECT

TITLE	PERIOD	ORGANIZATION
Microsensors for Explosives Detection: Designed / Fabricated MEMS sensors for trace detection of explosives. Project done at Micro Fabrication facility, IITB. Project guide: Prof. Soumyo Mukherji, Professor, S.B.B., IITB. Co-guide: Prof. V. Ramgopal Rao, Professor, E.E., IITB	Jan-2007 till date	Indian Institute of Technology (IITB), Bombay

B.Tech PROJECT

TITLE	PERIOD	ORGANIZATION
Robotic Arm: A 2 D.O.F. robotic arm was made and controlled depending upon sensor(s) input. The arm was restored to the initial position, after sudden power failure.	Jan-June 2006	Netaji Subhas Institute of Technology (NSIT), New Delhi

ACADEMIC ASSIGNMENTS

TITLE	PERIOD	ORGANIZATION
Real time ECG monitor and Display: Real time monitoring and display of the ECG on 128X128 pixels graphical LCD. Parallely, LabWindows CVI was used to prepare a GUI to collect data using DAQ card and analyze it for conditions like Bradycardia / Tachycardia etc.	July-Dec 2006	College In House
Digital thermometer: Accurately encode the analogue signal from the sensor and maintain a log file containing the reading along with the time of its recording.	June-Aug 2005	College In House
Line following Robot: Based upon the signal from the four IR sensors, the base motors would be driven by the microcontroller to follow a line.	Nov-Dec 2004	College In House
Digital clock: Clock was displayed on PC via serial link which could be programmed for hours, minutes.	Sep-Oct 2004	College In House

KEY SKILLS

DETAILS

Fabrication Technologies:

Hands on experience on oxidation furnace, ellipsometer, wet bench (mainly TMAH), RCA clean. Exposure to sputtering (Metal/Dielectric), RIE, profilometer, Evaporation systems.

Design tools:

EDA Tools: Xilinx, ModelSim.

Languages:

Programming Languages: C, C++
Hardware Description Languages: VHDL, Verilog

Others:

MATLAB, Origin, LabView, LabWindows CVI, AutoCAD, SPSS, CleWin

ACADEMIC INFORMATION

QUALIFICATION	INSTITUTE	BOARD/ UNIVERSITY	YEAR OF PASSING	MARKS
M.Tech (BioMedical)	Indian Institute of Technology Bombay	IITB	Pursuing	9.15/10
B.E. (Instrumentation and Control)	Netaji Subhas Institute of Technology	Delhi University	2006	68.92%
Higher Secondary XIIth (AISSCE)	Hans Raj Model School	C.B.S.E.	2002	80.8%
Secondary Xth (AISSE)	Hans Raj Model School	C.B.S.E.	2000	84.8%

ACADEMIC AWARDS/ACHIEVEMENTS

DETAILS	YEAR
Overall 2 nd position in M.Tech (BioMedical Engineering).	2007
All India Rank (A.I.R.) 34 in GATE (Graduate Aptitude Test in Engineering) examination	2006
Top 10% scorer in Junior level screening test of 31st National Mathematics Talent Competitions.	1999

Relevant Courses

Introduction to MEMS, VLSI Technology, Hardware Description Languages, Digital Integrated Circuits, Medical Sensors, Biomedical Instrumentation, Embedded Systems, Signals and Systems

POSITIONS OF RESPONSIBILITY HELD

DETAILS
M.Tech (BioMedical) Institute level representative [Aug,2006 – Apr,2008] <ul style="list-style-type: none">Responsible to put forward the general views of M.Tech (Biomedical) in front of faculty/institute.Constituted an integral member for coordinating departmental activities.
Placement representative, Institute placement team [Aug,2007 – Apr,2008] <ul style="list-style-type: none">Coordinating placement activities of about 1200 students registered for placements.

EXTRA CURRICULAR ACTIVITIES/AWARDS

DETAILS
Was an active member of technical Committee, <i>IWPSD</i> , IITB (Dec, 2007) and was responsible for scheduling and managing technical sessions.
Actively participated in <i>P.G. Sports</i> , IIT Bombay organized during Jan-April, 2008.
Coordinator for departmental event, <i>GeneRations</i> , School of Biosciences and Bioengineering, IITB an all India event during March, 2007.
Participated and organized many events like Gizmo Gambol, Amnesia, Glider design to name a few during Innovision, Techfest, NSIT during my B.E. years.

PRACTICAL ASSIGNMENTS/INTERNSHIPS

<u>Organization:</u> <u>Department:</u> <u>Duration:</u>	Indian Institute of Technology Teaching Assistant, Prof. Soumyo Mukherji, School of Biosciences and Bioengineering July,2007 - Dec,2007
<u>Organization:</u> <u>Department:</u> <u>Duration:</u>	Delhi Metro Rail Corporation Training (Electrical and Electronics) Dec,2005 - Feb,2006
<u>Organization:</u> <u>Department:</u> <u>Duration:</u>	Solid State Physics Laboratory Training June,2005 - July,2005
<u>Organization:</u> <u>Department:</u> <u>Duration:</u>	Electronics Regional Test Laboratory (North) Training Division Dec,2004 - Jan,2005

Personal Profile

- Gender : Male
 - Nationality : Indian
 - Languages known : English, Hindi
 - Marital Status : Unmarried
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