Academic Details

**Key Academic Projects :**

**Unique identity detection by biometric finger recognition** (under prof Deepak Phatak ) *(2009)*

Designed a **C++ program** that uses binary image of fingerprint of a person and compares

it with other similar images, was a part of the **duplication detection team**.

**Economics research project** (under prof. Haripriya Gundimeda) *(Aug-Nov’10)*

Conduction of market analysis of the Gitanjali group of jewellery industry using SWOT analysis,

4Ps and PESTLE analysis.

**Digital gaming project** (under prof. Sachin Patkar) *(Jan-Apr’11)*

Conceptualized an on-board circuit of a car racing game using basic building blocks of digital

electronics. Involved Verilog source code creation and simulation using Iverilog compiler.

**Operational amplifier designing task** (under prof. Anil K.G) *(Jan-Apr’11)*

Assembled and tested an opamp on-board designed using Ngspice circuit simulator.

**Product innovation project** (under prof.Mrinmoyi Kulkarni) *(Jan-Apr’11)*

Involved suggestion of a new product(head motion controlled wheelchair) with its design and

feasibility focused at improvement in health maintenance techniques.

Currently working on a project encompassing the fields of **Basic Communication Principles**,

**Digital signal processing** and **Electromagnetism** (under prof. S.N.Merchant) *(Aug’11-ongoing)*

Currently working on a project based on **microwave integrated circuites** (under prof. J.Mukherjee)

*(Aug’11-ongoing)*

**Internships:**

Worked as a ***curriculum developer*** for **‘iDiscoveri Education Pvt. Ltd.’** in Gurgaon. *(Dec’10)*

-Designed the **course structure** and content for secondary classes, mainly Science and Maths based

on experimental, application oriented and **research** methods.

-Received an excellence certificate and a bonus(Rs.5000) for the appreciable output and dedication.

 Worked as a ***trainer*** and ***technology consultant*** for **‘Zee Learn Pvt. Ltd.’** in Mumbai. *(May’11)*

-Trained a batch of 20 students in the **Zee robotics summer camp** organized by the company.

-Visited Bangalore as a company **representative** to conduct the camp and guide the other trainers.

-Aided in robotics kit improvement after research and feasibility check. Implemented various

marketing concepts for publicizing zee robotics kits.

**Courses Undertaken(departmental):**

Principles of communications systems(with lab), Microprocessors(with lab), Electromagnetic waves, Microwave integrated circuits, Probability and Random processes *(2011)*

Analog circuits(with lab), Electrical machines and power electronics(with lab), Digital systems(with lab),Electronic devices and circuits(with lab), Signals and systems, Network theory. *(2010-2011)*

Introduction to electrical systems, Introduction to electronics

*(2009-2010)*

**Additional courses(non departmental):**

Computer Programming and Utilisation, Calculus, Data analysis and Interpretation, Engineering Graphics and Drawing, Experimental and measurement laboratory, Economics, Philosophy.

**Technical Skills:**

Programming Languages: C/C++, HTML OS: Windows(XP,Vista,Windows 7), Ubuntu

Softwares: Matlab, Scilab,Verilog, MS Office, Spice, Adobe Photoshop.

Positions of responsibility

**Hostel photography and fine arts secretary** *(Mar.25th’10-Mar.30th’11)*

-Conducted various **workshops and intras** .Designed the **hostel t-shirt, magazine and logo.**

-Assured **proper ambience** at different events and festivals to make people more enthusiastic for

participation and uploaded the pictures on the hostel google group timely.

**Institute fests-**

**Coordinator of Competitions,Mood Indigo’10**

Conceptualized various fine arts competitions to be held in the fest.

**Coordinator of Exhibitions, Techfest,11.**

**Led** a team of **10 organisers** to successfully handle the international technology exhibition for three

days which had more than **10,000 visitors**.

**Organizer** -National Debating Committee’09; Eureka, Entrepreneurship cell’09.

Accolades and extracurricular activities

**Technical activities:**

Took part in the **Formula-One Racing Car Making Competition**(organized by the Technical Club

of IIT Bombay), by successfully making a remote controlled all terrain bot.

Participated actively in sessions and seminars (**MATLAB, Latex, Shell Scripting, Web**

**Development** and **Microcontrollers)** conducted bySTUDe clubof IIT Bombay.

**Cultural Activities:**

 Awarded **Institute Fine Arts Trophy** for leading the hostel to 1st position in interhostel FA events.

 Received **‘Hostel Colour’** for participation and leadership in cultural events interhostel levels.

 Received **‘Organisational Special Mention’** for conducting various workshops (origami,3-D

modeling, photoshop etc) and competitions intrahostel.

 Awarded ‘**PAF Colour’** for dedication towards ‘Performing Arts Festival’(’09)- the biggest

interhostel cultural event in IITB. Was subincharge for PAF Cultural Group (’10).

 Participated in Mood Indigo(’09) Fine Arts events as an **IITB contingent**.

 Acquired **3rd position** in character sketching at **‘Malhar’09’**- St. Xavier’s College fest,Mumbai.

 Member of **VAST**(Video and Animation Support Team) under the guidance of Prof. Sumant Rao.

Active participation in **Kaladarshan**-fine arts exhibition of IITB in both publicity and organization.

Active member of Rang, Pixels and Silverscreen(the fine arts, photography and movie making clubs)

**Sports activities**

Certified student of **National Sports Organisation-Badminton**

Enthusiatic in playing carom, lawn tennis and TT.

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**Others activities**

 Passionate for **photoshop**, photography,video making/editing and **web designing**.

 Won many interschool competitions in the fields of **essay writing** and **English extempore**.

**Declaration**

I hereby declare that the information given above is true to the best of my knowledge, as of August 2011.

**Priyanka Arya**