



**SUMIT GUPTA**  
**Electrical Engineering**  
**Indian Institute of Technology, Bombay**  
**Specialization: Communication & Signal Processing**

**09D07006**  
**UG Fourth Year**  
**Male**  
**DOB: 21/06/1991**

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	8.03
Intermediate/+2	C.B.S.E	Happy Days School	2008	77.80
Matriculation	M.P. Board	Bal Shiksha Niketan School	2006	90.00

## INDUSTRIAL EXPERIENCE AND RESEARCH PROJECTS

- **SONY CORPORATION, Tokyo, Japan** May'12 – Jul'12
  - Summer Internship at SONY Corp. Japan as a Software Engineer Intern for 3 months
  - My project was to make software and applications for Sony's future camera models
  - Created Signature Write Feature for Sony Cyber-Shot Cameras, my very own idea, executed fully by me.
  - Learned & Improved Sony's unique features (not in Nikon, Canon) by optimizing existing algorithms by 30%.
  - Introduced Auto-sleep mode in Cyber-Shot cameras to reduce power consumption by more than 50%.
  - Worked on Date Write function in Cyber-Shot cameras- introduced new colors, new fonts, and unique patterns.
- **KARLSRUHE INSTITUTE OF TECHNOLOGY, Germany** May'11 - Jul'11
  - Project Title: Image Stitching Algorithms for high resolution Optical Microscopy - Contact Person: Prof. Dr. Wilhelm Stork
  - Optimized the Image stitching process by using my own algorithms and extracting some features from Hugin-SDK
  - My task was to implement this technology to cell phone microscopes for mobile microscopy
  - The differentiating factor in our approach was custom optics and cost effectiveness
- **STANFORD UNIVERSITY PROJECT, CONCEPTUALYZE** May'12 - Aug'12
  - Project Title: Visual Understanding Environment Project Contact Person: Aaron Loh, Stanford University
  - Modified Visual Understanding Environment, Open source software to create WIKIBOX for Conceptualize
  - Created VUE- WIKIBOX using Java and used highly effective algorithms for selected and precise results
  - Also included rapid switch concept between text and GUI version to add to the concept map for better visualization.
  - This project got selected for Stanford's LDT Expo and got very good response by LDT Department Director, SU
- **LARSEN & TOUBRO INFOTECH, Mumbai** May'10 - Jun'10
  - Undertook a Project on MS SharePoint migration from 2007 to 2010 and thus improved "L&T-scape"
  - Improved SMS Gateway Project & got Appreciation Certificate by CIO, L&T InfoTech for my sincere work.
  - Invited for a conference with Microsoft at L&T on its new product "Microsoft Forefront Identity Manager"
  - The agenda of the meeting is to implement this software in L&T. The project was worth \$80 million
- **DEFENSE RESEARCH & DEVELOPMENT ORGANIZATION, Govt. of INDIA, Ministry of Defense** Nov'11 - Dec'11
  - My work at DRDO Head-Quarters, New Delhi – "Software Engineering in Embedded Systems"
  - Created a device to be used for defense purposes in emergency cases that uses AI
  - Can't illustrate more on technicalities, confidential reasons, as this is for Govt. of India, defense purposes
- **FOUNDER & CEO, EDUCEPT TECHNOLOGIES PVT. LTD.** Jul'12 – till now
  - Used my software and coding skills to start a company with 3 people for the uplift of Indian education Standards.
  - Vision of the company is to provide effective database management solution to optimize working efficiency of educational institutions in India and making the Indian education system more conceptualized.
  - The team currently consists of 9 people including 3 IIT Alumnus, 1 IIM Alumni assisted by Professors and Teachers
- Lead the team of 5 people and successfully completed "Mini India UID Project based on Fingerprint Identification". Our work was to do Application part and to make "Template Matching Function" Using C++ Programming

- Created **ORS Reader software** using by C++ & Computer Vision which can read ORSs effectively, accurately and quickly.
- Also created **VISA Photo Check software in C++**, which inputs user's photograph and outputs if the photo is valid as per country's Visa Rules. The software also gives the reason of the photo being invalid.
- Made a **LEDs based Brick Shooting Game**. The aim of the game is to destroy the moving wall by shooting it, brick by brick, before it reaches the player. The whole hardware and logic was implemented using ICs and Flip-Flops
- Created a **Library Management System** that executes the operations required by the library, to be set up in the Department of Electrical Engineering, IITB. Designed code using PHP to connect My SQL database to the interface
- Worked on several small projects based on **Speech Synthesis and Recognition** as part of Course Project.
- Made a **Line Following Robot** using Microcontroller (ARDUINO-UNO) for the competition "Loop-Rush" at TECHFEST'11

## SCHOLASTIC ACHIEVEMENTS

- Secured an **All India Rank of 315** in **Indian Institute of Technology Joint Entrance Examination, 2009**
- Secured an **All India Rank-640** and **State Rank-34** in **AIEEE, 2009**
- Among the **top 50 students** selected all over the world for online **Caltech Space Challenge Competition** by NASA-JPL and Keck Institute of Space Studies
- Appointed as a **Institute Teaching Assistant** in my sophomore year with a stipend of Rs. 6000 per month
- **1st** in District and **12th** position in State (M.P.) in 10th Board Exam
- Got selected for **MIT-IITB AITI** 2 months long Workshop by MIT Graduates on Innovation and Entrepreneurship
- Also attended 3 days long workshop on technology as a part of **Harvard US India Initiative**
- Got 11<sup>th</sup> Position all over the world in **LENEVO: The Do Network Competition**

## SOFTWARE SKILLS

**Tools Proficiency:** skilled in MATLAB, Latex, SCILAB, MS Visual Studio, and MS SharePoint

**Technical Skills:** C/C++, open CV, JAVA, Microcontrollers, Spice, Eagle, I Verilog

**Web Development Skills:** Ruby on Rails, JQuery, SVN, GIT, Core Java, J2EE, My SQL, PHP, CSS, HTML

**Coding:** Data Structures & Algorithms, Object Oriented Programming, Algorithms Implementation & Optimization

## POSITIONS OF RESPONSIBILITY

- **Institute Secretary, International Relations:** Responsible for International Affairs, Student Exchange Programs, MOUs, Language Course Classes and Seminars by foreign University Professors held in IIT Bombay Apr'11 - till now
- **Department Academic Mentor**, Electrical Department of IIT Bombay Mar'11 - till now
- **Class Representative**, Electrical Engineering Department of IIT Bombay Jul'10 - till now
- **Institute Teaching Assistant** in Humanities and Social Sciences Department of IIT Bombay Jan'11 - Mar'11
- **Convener of Campus Radio**, Initiative by Institute Cultural Council of IIT Bombay Apr'10 - Oct'10
- **Council Member, EESA** (Electrical Engineering Student Association) Aug'10 - Apr'11
- **Coordinator for Mood Indigo**, Asia's largest College Cultural Festival Sep'10 - Dec'10
- **Coordinator for TECHFEST**, Asia's largest Science and Technology Festival Oct'10 - Jan'11

## ACCOLADES AND EXTRA CURRICULAR ACTIVITIES

- Awarded **Certificate of Appreciation** by Dean of IIT Bombay for my Disciplinary work and Altruistic Efforts towards activities of National Service Scheme (NSS). This certificate was given to 15 students out of 250 involved
- Acted in a **short movie by MTV**(National Television Channel) based on the Hollywood Movie 'Inglorious Bastards'
- **Interests** - Chess(1<sup>st</sup> in Division), Inline Skating, Rubik's Cube solving, Solving Logic Puzzles & Cracking Algorithms
- **Languages Known** – English(US), English(UK), German, Japanese, Hindi, French(basic)

I certify that all the above information is correct and up to my knowledge.

Contact Details:

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