Hitendra Sahu   113300017
Biosciences & Bioengineering   **M.Tech.**
Indian Institute of Technology, Bombay   **Male**
                                                  DOB: 15-07-1985

Examination	University	Institute	Year	CPI / %
Post Graduation	IIT Bombay	IIT Bombay	2012	8.03
Undergraduate Specialization: Biomedical Engineering				
Graduation	RGPV Bhopal	SGSITS Indore	2008	66.76
Intermediate/+2	M.P. Board	Govt. B. H. S School	2003	66.20
Matriculation	M.P. Board	Govt. B. H. S School	2001	70.06

POSITION OF RESPONSIBILITIES

Academic Unit Representative of Academic Affairs , BSBE (Masters), IITB   **[June'12 onwards]**
- Member of academic council to arrange three days institute level Orientation program for PG and PhD fresher students
- Conceptualize and arrange departmental three days orientation program for the departmental Masters and PhD fresher student
- Organizing, as a committee member, "ENTHUSE", an initiative of the academic council aimed to promote R&D among students

Lecturer at SGSITS,Indore   **[July, 2008 – July, 2011]**
- Taught Analog Electronics and Sensors & Instrumentation to B.E. students
- Delivered guest lecture on Rehabilitation Engineering to all the faculty members and students of the Dept.
- Guided 6 Under Graduate Projects

Convener of Blood Donation Camp organized at SGSITS, Indore   **[Jan, 2009, 2010]**
- Organize Blood Donation Drive under AAYAM-2009 as a faculty In Charge of the event. Lead a team of 20 people and managed all Financial, Logistic and safety responsibilities of the event.

Teaching Assistant for the course Virtual Instrumentation in C under Prof. S. Mukherji
- Responsible for conducting labs, conceptualization and designing of projects/problem statements and teaching the software   **[July'12 onwards]**

ACHIEVEMENTS

- Selected for the ICICI PO program through a National level Recruitment process of ICICI Bank.
          [Nov, 2008]
- GATE 2011 Qualified with 98.24 percentile in Instrumentation Engineering Conducted by IIT Madras.
- Secured 74 percentile in CAT-2010, conducted by IIM's.

PROFESSIONAL EXPERIENCE

- Worked as a Lecturer at SGSITS, Indore in the department of Biomedical Engineering. Subjects taught are Analog Electronics and Sensors and Instrumentation.   **[July,2008 – July,2011]**

- Worked as a Part time Assistant Research Engineer on "Telemedicine Appliance research project" with Sarvodaya Shikshan Samiti,Indore, funded by Madhya Pradesh Council of Science and technology, Bhopal. Key role includes the design and testing of the electronics circuits for ECG acquisition system and device an RFID based transmission media to transmit the ECG signal.   **[May-2008 to Dec-2008]**

CERTIFICATION COURSE

➢ Pursuing an online Certification Course on **Intellectual Property 101** from Indian Institute of Patent and Trade Mark Attorney. Course contents includes Intellectual Property Right, Patents, Copyright, Designs, Trademarks, Plant Variety and Farmer Act, Semiconductor Integrated Circuits layout Design Act, Trade Secret, Unfair Competition, Traditional Knowledge and Introduction to IP Asset Management in Business

ACADEMIC PROJECTS

M.Tech Project   **Guide: Prof. P C Pandey**, **Dept. of Electrical Engineering**
- **Hardware Development of Impedance Cardiograph**   **[May, 2012 – till date]**

➢ Designed the impedance simulator for calibration and testing of ICG instrument
➢ Designing the impedance cardiograph hardware for acquiring the ICG signal
➢ Key Role includes the designing of circuits for analog and digital signal processing, Embedded applications of PIC24F and dsPIC33EP Microcontroller, PCB designing and development of PC interface

B.E Project   **Guide: Prof. Vibha Bhatnagar, Dept. of BME, SGSITS**
- **Biotelemetry system to transmit vital body parameters**   **[May, 2007- April, 2008]**

➢ Developed a 3 channel RFID based Biotelemetry system, that can acquire, process and transmit 3 Vital parameters ECG, Heart Rate and Respiration Rate up to a distance of a few kilometers

COURSE PROJECTS

- **Microcontroller (ATMEGA32) based Impedance meter**   Guide: Prof. P. C. Pandey, EE Dept., IITB
  Course: Embedded System Design,   **[Jan'12-Apr'12]**
    ➢ Designed a Phase sensitive detection based Impedance measurement system that can measure an unknown impedance up to 30 KHz frequency of the test signal.

- **Real time ECG acquisition and processing**   Guide: Prof. Soumyo Mukherji, BSBE Dept. IITB
  Course: Virtual Instrumentation in C   **[July, 2011-Dec, 2011]**
    ➢ Developed a GUI and implemented the algorithm for the digital processing for calculating the heart rate in real time and also detected different types of arrhythmias including an automatic drug delivery system according to the arrhythmia detected

- **QRS wave detection from an ECG**   Guide: Prof. P. C. Pandey, EE Dept., IITB
  Course: Electronic System Design   **[July, 2011-Dec,2011]**
    ➢ Designed an analog ECG signal conditioning circuit, detected the R-peaks for calculating heart rate and achieved good signal to noise ratio and offset cancellation

- **Statistical analysis of Academic Performance of PG Students** Guide: Prof. S. Arun Kumar, CSE Dept.
  Course: Biostatistics   **[Jan'12-Apr'12]**
    ➢ Performed 1-way , 2-way ANOVA and regression analysis using R software to find the variance and correlation on the basis of parameters like, UG academics, University, sex, GATE score, background stream ,Also perform Regression Analysis on the same data to find out the relation

INERNSHIP AND TRAINING

➢ Successfully completed training on Electronic circuits at SCITNTECT Pvt. Ltd, Indore   [**Janurary,2008**]

Accomplished projects entitled, "Sound Operated Switch with a relay driver" under the supervision of Mr. Nitin Joshi, Faculty at SCIENTEC Pvt. Ltd.

➢ Completed fifteen days training on Embedded systems at SCIENTECH Pvt.Ltd, Indore. A course on ATMEGA controller along with various hardware interfacing, **[Dec, 2011]**
Accomplished projects "Line follower Robot" and "Remote controlling of Home appliances"

PROGRAMMING SKILLS AND SOFTWARE

➢ **Programming languages**: C, C++, Visual Basic, VC++, Data Structures through C and C++, MATLAB, VHDL,

➢ **Software**: Keil, MPLAB, PROTEL, Altium Designer Suite, LTSpice, LabWindows CVI, Microsoft Visual Studio Express 2010, R Software

EXTRACURRICULAR ACTIVITIES

➢ Presented a paper on "Nanotechnology in health care System" in the National level tech fest-07, at SGSITS Indore

➢ Actively participated in the Blood Donation Camp organized at SGSITS, Indore in 2008.

➢ Organized "Bio Freak" an event under AYAM-07, techfest of SGSITS.