SAURABH SAHU | 06EC3202
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EDUCATION:

Degree/certificate	Year	Institute	Marks
Dual Degree (B.Tech + M.Tech) in Electronics and Electrical Communication Engineering	2011	IIT, Kharagpur	CGPA 9.09/10
Class XII	2006	CBSE	87.8%
Class X	2004	CBSE	93.8%

AWARDS/ACHIEVEMENTS:

- Among the **120** students from all over India who were awarded the '**Summer Research Fellowship**' by the **Indian Academy of Sciences, Bangalore** so as to pursue a summer internship in **IISc Bangalore**
- Awarded '**CBSE Merit Scholarship Professional Course**' annually for being **3rd** in the state of Odisha in **AIEEE-2006**
- Being awarded the **NTSE scholarship** annually, 2004 onwards
- Awarded **silver medal** in the **Regional Mathematics Olympiad** (RMO), 2006
- Qualified among **top 1%** students for **Indian National Physics Olympiad Examination**, 2006
- All India Rank **49** in 5th **National Science Olympiad**, 2003

PROJECTS/SUMMER INTERNSHIP:

- **University of Massachusetts, Dartmouth, Massachusetts, USA**   **May-July 2010**
  - A new method for implementation of Band-limited inverse filter was proposed to improve the range resolution of the processed signals in Sonar systems without affecting the detection performance much
  - The robustness was determined by studying the performance of the detector under various conditions of external noise strength and also the relative strength of the desired signal echoes
  - Paper to be submitted in '**2011 International Conference on Acoustics, Speech, and Signal Processing (ICASSP)'**
- **Philips Research Asia-Bangalore, Bangalore, India**   **May-July 2009**
  - Synthetic generation of ultrasound Doppler signals was carried out given the peak systolic frequency shift (S), the end diastolic frequency shift (D) and the period of one cycle for various arteries
  - Paper submitted in '**BIOSTEC 2011, 4th International Joint Conference on Biomedical Engineering Systems and Technologies'**
  - Awarded an '**Excellent**' in the training certificate by my project guide
- **Indian Institute of Science, Bangalore**   **May-July 2008**
  - Algorithm for sub-optimal detector (which is easier to implement than the optimal one) for detecting signal embedded in non-Gaussian noise was proposed
  - Computation time decreased by 30 % and area required by hardware decreased by 20% without much affect on detection performance

PROJECTS IN IIT KHARAGPUR:

- **B.Tech / M.Tech Project**   **Aug 2009-Present**
  - PID controller for a highly sensitive μ-g resolution tunnelling accelerometer has been designed to improve the response time from 42ms to 1ms
  - Implemented in FPGA which is to be followed by ASIC development
- **Term Project**   **Oct-Nov 2008**
  - Developed software for Speaker Identification using MFCC and Artificial Neural Network with an accuracy of 90%
  - Finalist at '**Envision**' a National Product Design competition organized by Entrepreneurship-cell, IIT Kharagpur

POSITIONS OF RESPONSIBILITY:

- **Captain, Hardware Design Team**, Patel Hall of Residence, 2010-11
  - Responsible for successful participation in the upcoming Inter-hall Hardware Design Competition
  - Organized Intra-hall hardware design competition
- **Library Secretary**, Patel Hall of Residence, 2007-08
  - Online system for Library including database of books and their issue status brought into effect for the first time
  - Initiated indexing of library books, and an approx 10% increase in books procured

EXTRA-CURRICULAR ACTIVITIES:

- **Gold**, Inter Hall **Product Design** (2007) for designing a 'Automatic Railway Level Crossing using Micro Piezoelectric Transducers'
- **Bronze**, Inter Hall **Hockey** Tournament held in February 2008
- **Bronze**, Inter Hall **Dramatics**, 2008
- Member **Athletics Team**, Patel hall of Residence
- Finalist in '**Nightshift**', Kshitij 2009, Annual techno-management fest of IIT Kharagpur