



Ankur Abhishek
Electrical Engineering
Indian Institute of Technology, Bombay
Specialization: Communication & Signal Processing

09D07035
UG Third Year(Dual Degree)
Male
DOB: 21 Dec 1990

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	6.18
Intermediate/+2	CBSE	Central Academy	2008	78.60
Matriculation	ICSE	Don Bosco Academy	2006	92.60

INTERNSHIP AND WORK EXPERIENCE

TATA MOTORS ENGINEERING RESEARCH CENTRE, PUNE

[May'11 - July'11]

- IMPLEMENTATION OF **CAN BOOT LOADER** FOR **PIC18F4431** THROUGH **SPI PROTOCOL**
 - Coded Boot loader for PIC18F4431 Microchip Microcontroller
 - Flashed the code using **External CAN controller chip**
 - Worked on **BOSCH** and **PI(open)** ECU's
 - Studied the communication of **Controller Area Network(CAN)** in automobiles
- **TATA NANO-EV RANGE EXTENDER** PROJECT
 - Did a **comparative study** of EV's (**Toyota Prius** , **Chevy Volt** , **Nissan Leaf** primary subjects)
 - Sampled vehicle parameters from **EMS,BMS & ECU's** of **NANO (EV)** using **INCA**
 - Proposed the Motor ratings and type optimal to above sampling data
 - Proposed a **Battery(lead acid)-Ultracapacitor** model to **enhance battery recharge cycles**
 - Simulated the above proposed model in Simulink

KEY ACADEMIC PROJECTS

- **OPTICAL SIGNAL TRANSMITTER:** Course Project
[Jan'11-Apr'11]
 - Designed a Photo **Intensity sensor and actuator combination**
 - Analog Signal was transmitted optically, received and decoded as Digital signal
 - Demonstrated its use in **Traffic Light Controller**
- **BASIC CALCULATOR:** Course Project
[Jan'11-Apr'11]
 - Built a calculating device **under constraints** of using only **simple Integrated Circuits**
 - Device was capable of performing simple mathematical & logical calculations
 - Device took **keyed inputs** from user and displayed the result on **7seg. Display**
- **MINI NATIONAL UID FOR IIT CAMPUS:** Prof. D.B.Phatak
 - The project was designed to handle activities in the institute like registration of new students, automatic generation of their e-mail ids, verification of their personal details and opening their accounts in the Central Library of IIT Bombay by taking their **fingerprints** using **biometric sensor**
 - **Led a team of 8 members** and efficiently cooperated with other groups of the project
 - **Developed an efficient algorithm** to keep the binary database of all the users updated
 - Integrated different sections of the project to make a working application

TECHNICAL SKILLS

- **Languages** : C, C++, Java, Assembly (8085 & PIC18F4431)
- **Softwares** : Matlab, Scilab, INCA, LABVIEW, Simulink, SEQUEL, MPLAB IDE, DAQ
- **Environment**: Ubuntu, Fedora, Windows

TECHNICAL ACTIVITIES

- **Solar Splash** *Techfest, 2010*
 - Finished in **Top 20** out of over **1200 participants**
 - **Designed a boat** (Aurora) which used **ambient light to run its propellers**
 - It housed a **energy storing mechanism** such that it could **run even in absence of light**
 - Was equipped with **automated rudder**
- **Formula1 RC Car Race** *Institute Competition*
 - Secured **5th position** among **83 entries**
 - Designed a **differential drive remote controlled** car controlled by **wireless radio communication**
 - Had **Anti-Tumbling, Obstacle Deflector** mechanisms and other techniques to overcome the challenges of the circuit
 - Vehicle was completely **splash proof** and **robust**
- **Line Bot** *Institute Competition*
 - Was one among 4 teams in the entire institute who completed the challenge
 - Designed a bot which followed a black strip on white surface
 - Employed Photodiode and LED combo for sensors
 - Employed logic circuits to overcome crisscrosses

POSITION OF RESPONSIBILITY

- **Co-ordinator** in **MOOD INDIGO 2010** , IIT Bombay's cultural festival
 - **Led a team of 13 organizers**
 - Organized the rostrum for Katatonia's performance
 - Channeled the guests into their respective accommodation facilities
- **General Secretary** in school's **STUDENT COUNCIL COMMITTEE**
 - Colligated between the Students and school Administrative Body
 - Proposed **2 reforms in school charter**
 - Held the post for **two consecutive years**

AWARDS AND ACCOLADES

- Recipient of **HINDUSTAN PRATIBHA SAMMANN** by **Sh. NITISH KUMAR**, honorable **Chief Minister** of Bihar
- Secured an **All India Rank of 1030** in **NATIONAL SCIENCE OLYMPIAD**
- Recipient of **National Talent Scholarship** funded by **HUMAN WELFARE TRUST OF INDIA**
- Recipient of Merit Scholarship funded by **NATIONAL EDUCATIONAL COUNCIL**
- Secured **All India Rank of 12** in **NATIONAL SCHOLARSHIP EXAM** conducted by **MILLENIUM ART CLUB And CHARITABLE SOCIETY**
- Awarded **cash award** by **Triumphant Institute of Management Education Pvt. Ltd** in 2009

EXTRA CURRICULAR ACTIVITIES

- Member of **FSAE IITB Team 2012**
- **Course** in **Aerobics** under **National Sports Organization**
- Reached **Quarter Finals** of **INSTITUTE CARROM GC** (2010-2011)
- Secured **3rd position** in **Inter School CARROM(singles)** 2003-2004
- Reached the **Quarter Finals** of **Inter School CARROM(singles & doubles)** 2004-2005
- Find **keen interest** in **doctoring electronic equipments**