

Srijan Dhare Electrical Engineering Indian Institute of Technology, Bombay Specialization: None 100070015 UG Third Year (B.Tech.)

DOB: 12-09-1992

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	7.64
Intermediate/+2	CBSE	Kendriya Vidyalaya	2009	88.00
Matriculation	CBSE	Kendriya Vidyalaya	2007	90.30

SCHOLASTIC ACHIEVEMENTS

- Secured All India rank 112 among 460,000 candidates (99.88 percentile) in IIT-JEE 2010
- Secured All India rank 1618 among 1,118,000 testees (99.85 percentile) in AIEEE 2010
- Obtained **State Rank 3rd** among all OBC candidates in MP Pre-Engineering Test 2010
- Achieved **41**st rank all over India in **10**th Senior Mathematics Olympiad by KVS, New Delhi
- Secured All India rank 164 in VIT 2008 out of around 310,000 candidates
- Awarded scholarship by Shri Shivraj Singh Chouhan, honourable Chief Minister of Madhya Pradesh for academic excellence

ACADEMIC PROJECTS

Home automation system

Aug 2012-present

- Singlehandedly working to develop Smartphone operated low-power Switches
- ➤ Plan includes a GPRS sending device, main server to perform security *check*, and the two-way switch that goes On/Off as guided from Main Server
- ➤ Aim to give comfort to Indian population by making it affordable and easy to install, and intelligent switches that save power using microcontrollers

GPS-GSM based vehicle tracking system

Jun-Aug 2012

Guide: Prof. Girish Kumar, EE Department, IIT Bombay

- Using **AVR studio**, **Eagle** circuit design and some thoughtful coding, made an elegant *Position Tracker* by SIM 900a(receiver) and SIM 908(transmitter) modules
- Completion of project appreciated by its commercialization as a product at SITCOM
- Made a Graphical User Interface using MATLAB, acts as gateway to the system
- ➤ Benefits over the existing models **Speed determination** (a challenging feature), Timestamp, Path display, Google Earth **compatible**, **cheaper and affordable**

CTARA water scheme analysis and assessment project Guide: Prof Milind School, Hand, CTARA, UT Pombou.

May-Jul 2012

- Guide: Prof.Milind Sohoni, Head CTARA, IIT Bombay
- Carried out detailed analysis for functionality of existing water supply schemes in three major talukas of district Thane – Jawhar, Mokhada and Shahapur
- ➤ Designed Scheme proposed an scheme to feed 2 tankerfed zones having 7-10 villages each, source being the *Middle Vaitarna* river
- ➤ Highlighted the scope of scheme execution to Zilla Parishad of Thane, after designing a feasible pipe layout (using Branch and Loop) and estimating its cost to be INR 49 lakh

Motion based 3-lane Car Racing game

Feb-Apr 2012

Guide: Prof. Sachin Patkar, EE Department, IIT Bombay

- Gestated a car race game, similar to those in Smartphone via verilog coding in Quartus II
- Game design involves random traffic in designated lanes and a player car on the LCD
- > Controlling done by reading the accelerometer output from the DEO Nano-board
- Remodelled popular PC game "POCKET TANKS"

Oct-Nov 2011

Guide: Prof. D. B. Phatak, CSE Department, IIT BOMBAY

- Incorporated the Graphical User Interface(GUI) to play new pocket tanks on Windows
- > Developed algorithms in C++ for different type of explosion kicks and dirt fall
- Led a team of 4 to design 10 game-weapons, all distinct by trajectory, blast and colour

INTERNSHIPS

• EDFORA - Education For All

May 2012

- Contributed as an evangelist for spreading secondary education to poor by proposing strategies to stakeholders for drawing in the renowned teachers of Mumbai
- > Relayed mutual benefits and perspectives to HODs of many coaching classes
- Ekjaa Unanimous growth

Dec 2011

- > Suggested potentially new idea for "water supply and sanitation" for slums
- ➤ Communicated with the directors of Slum Rehabilitation Society(SRS), Apnalaya and convinced them to accept our detail-oriented idea for their NGO

COMPUTER SKILLS

Operating systems : WindowsProgramming Languages : C, C++, Html

Packages: MATLAB R2010a, LTSpice, EPANET2.0, Photoshop CS3

STREAM COURSES UNDERTAKEN

- <u>Core</u>: Microcontrollers, Electric Machines, Probability, EM Waves, Power Electronics, Communication Signals, Network Theory, Electronic Devices and Circuits, Image Processing, Analog Systems, Digital Systems, Computer Programming and Utilization
- Maths: Differential Equations I and II, Calculus, Linear Algebra, Complex Analysis
- Data Analysis and Interpretation, Experiment and Measurement Laboratory, Sociology

EXTRA-CURRICULAR ACTIVITIES

- Cycled 27.8 km Masjid Bandar to IIT Powai in 3 hours (2011), alone and self motivated
- Good at making approximations, probability and giving speech/presentation
- Won the Hostel's Freshman Performing Arts Festival 'Color' in PAF 2011
- Swam for 9 hours(8.1 kilometres) straight at IITB Swimmathon 2011
- Player in the hostel swimming team of four that achieved 2nd position in General Championship 2011
- Relish 'writing' in leisure time, and enjoy programming in C++, Verilog, HTML
- **Special Mention** for completing a responsible tenure as the **Convener, Krittika** *The Astronomy Club of IIT Bombay* 2011-12