



Computer Science & Engineering  
Indian Institute of Technology Bombay

120050003  
B.Tech.  
Male  
DOB:

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2016	8.15

## ACADEMIC ACHIEVEMENTS

- Secured an All India Rank of **290** in **IITJEE 2012** among **5 lakh** aspirants
- Secured **95.64%** in matriculation and **85.83%** in intermediate/+2 conducted by Maharashtra state board
- Secured **17<sup>th</sup>** position in **Indian National Mathematical Olympiad 2011** conducted by NBHM and Attended **IMO Training Camp 2011** conducted by HBCSE, Mumbai
- Awarded a Gold Medal in **Indian National Physics Olympiad 2012** and Attended **International Physics Olympiad Training Camp 2012** conducted by HBCSE, Mumbai
- Qualified for **KVPY 2011-12** fellowship with **AIR 215**
- Secured **8<sup>th</sup>** position in Maharashtra state in Highschool scholarship Examination conducted by Maharashtra state board

## WORK EXPERIENCE

### Software Developer, Function Space

Summer'14

- Implemented a **Document Classifier** in python using **Maximum Entropy Classification Algorithm**
- Used **D3.js** library to create User Interface with Dynamic and Interactive Components for data visualization

### Web Developer, Infermap

Nov'13-Feb'13

- worked as **Web Developer** at **Infermap**, a web based educational portal launched in 2014, started by IITB students

## ACADEMIC PROJECTS

### Machine Translation - Natural Language to SQL

Ongoing

Guide: Prof. Dr. Pushpak Bhattacharyya

- Working on various aspects of **Natural Language Processing** for translating queries written in natural language to SQL

### Chess

Mar'13-Apr'13

Guide: Prof. Amitabha Sanyal

- Served as a **Team Leader** of a 3 member team
- Implemented **Mini-Max algorithm** with **Alpha-Beta pruning** in **MIT-scheme** for machine player with moves optimized till 6 depth level of gameplay
- Integrated a **GUI** as well as playability over **LAN**

## Fish Aquarium Simulator

Oct'12

Guide: **Prof. Abhiram Ranade**

- An interactive virtual aquarium containing marine fishes swimming around in colorful habitat
- Designed and Developed in C++ with **graphical user interface**

## Steam Engine Simulation in Box2D

Mar'14-Apr'14

Guide: **Prof. Parag Chaudhuri**

- Simulated the motion of Steam Engine in Box2D, a Physics Simulation Engine based on OpenGL
- Used other tools like gprof, gnuplot to analyse and optimize the performance

## CODING AND DEVELOPMENT

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### iNote - Handwriting to Text Converter

Summer'13

*Institute Technical Summer Project*

- Built an **Android App** which takes notes in your handwriting and converts it to text
- Awarded **Best Research Project Award**

### Yahoo! HackU2013, Networking Site for Business Professionals

- An **Online Community Portal** for interaction between Manager and Staff
- Implemented Back-end in **PHP, SQL** and Front-end with **HTML, CSS** in **24 hrs** time period

## PRACTICAL SKILLS

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- Skilled in **C/C++** Object Oriented Programming
- Skilled in **scheme(Lisp)** and concept of functional programming
- Skilled in Web Development using **PHP, JQuery, HTML5, CSS3, MySQL** and Frameworks like **Laravel**(MVC Framework for PHP)
- Familiar with Android Programming, Assembly Programming, Bash, VHDL,  $\text{\LaTeX}$ , Prolog

## FIELDS OF RESEARCH INTEREST

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- Design and Analysis of Algorithms
- Machine Learning
- Natural Language Processing
- Number theory

## CO-CURRICULAR ACTIVITIES

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- Active user on online coding forums like HackerRank and SPOJ(Sphere Online Judge)
- Made an RC car for XLR8, a multi-terrain race for RC cars
- Successfully completed the course conducted by **National Service Scheme**
- Participated in interschool football matches
- have an avid interest in drawing

Homepage: [www.cse.iitb.ac.in/~anuragshirolkar](http://www.cse.iitb.ac.in/~anuragshirolkar)