

Prateek Chandan Computer Science & Engineering Indian Institute of Technology Bombay 120050042

UG Third Year (B.Tech.)

Male

DOB: 15-03-1995

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2015	8.67
Intermediate/+2	CBSE	DPS Bokaro	2012	95.80
Matriculation	CBSE	Sainik School Tilaiya	2010	9.60

## ACADEMIC ACHIEVEMENTS

- Secured an All India Rank of 358 in IITJEE 2012 among 5 lakh aspirants
- Awarded KVPY 2010-11 fellowship and attednded the prestigious Vijyoshi Camp 2011 at IISc, Bangalore and Summer Camp at IISER, Pune organized by KVPY
- Qualified **RMO-2011**: Regional Level Mathematics Olympiad sponsored by NBHM , Dept. of Atomic Energy , Govt. of India
- All India Rank 15 in National Cyber Olympiad , 21 in National Mathematical Olympiad and 51 in National Science Olympiad Conducted by Science Olympiad Foundation
- Secured 3<sup>rd</sup> Position in Codestruck, National Coding Competition conducted by Techfest, IITB
- Qualified for ACM-ICPC 2013 Onsite round at Amritapuri site

## WORK EXPERIENCE

### Software Developer, Shezartech

Summer'14

- Implemented a web based JEE Practice Engine with **ranking system** of student by **detecting difficulty** of problems
- Implemented a web based Learning Management System

## Technical Director & Developer, Infermap

Nov'13-Present

• Working as **Lead developer** and **Technical Director** at Infermap, web based education start-up launched in 2014 by IITB

## Web Manager, Students' Technical Activities Body IIT Bombay

Apr'14-Present

• Developing and Managing the Website of STAB IIT Bombay with other web apps

### TECHNICAL ACHIEVEMENTS

- Awarded **Tech Freshman Of The Year 2012-2013** among the **880** freshmen for being the most Outstanding fresher
- Built an Autonomous line follower, RC Soccer Playing Bot, RC Bot in institute compititions and secured 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> respectively in year 2012

## **PROJECTS**

## Extracting SQL Queries from Natural Language

Ongoing

Guide: Dr. Pushpak Bhattacharyya

• Working on various aspects of **Natural Language Processing** to extract SQL Queries from the natural language

## Voice Controlled Bot and Biped

Summer'13

Institute Technical Summer Project

- Implemented **Hidden Markov Model** for the voice processing module. Coded in MATLAB involved algorithms like **Viterbi and Forward-backward algorithm**
- Built a self-designed Remote controlled car and a Biped Bot to work from voice commands

### C++ to Scheme Code Converter

Mar'13-Apr'13

Guide: Prof Amitabh Sanyal

• Implemented **conversion** of basic C++ code into same functioning scheme code including few of the basic c++ libraries like math, string, stdlib etc

#### Sudoku Problem Generator and Solver

Oct'12-Nov'12

Guide: Prof. Abhiram Ranade

- Built a C++ based sudoku problem generator with varying difficulty levels
- The program solves all type of sudoku puzzles with **self-developed algorithm** using sets and probability with a nice UI

#### Cheetah Simulator in Box2D

Mar'14-Apr'14

Guide: Prof. Parag Chaudhuri

- Simulated the motion of cheetah on Box2D, Physics simulation engine based on OpenGL
- Implemented Theo Jansen Walking mechanism for the walking of cheetah
- Used tools like gprof, gnuplot to analyze the behaviour of the code and optimize its performance

## TECHNICAL SKILLS

- Skilled in C,C++, MIT-Scheme with concepts of object-oriented programming and functional programming
- Skilled in Web Development and Scripting using PHP, JQuery, HTML5, CSS3, AJAX, MySQL Web APIs and other framework like Laravel(PHP-based MVC Framework), Twitter Bootstrap
- Familiar with VHDL, Assembly Programming, BASH, MATLAB, LATEX, Prolog and Python

# POSITIONS OF RESPONSIBILITY

- Working as Web Manager, Students' Technnical Activity Body IIT Bombay
- Convener of Web and Coding Club, assisted the club manager in conducting workshops to promote coding culture and introduce latest technology among the students.
- Worked as Cordinator and Organizers in college festivals Mood Indigo and Techfest

## MAJOR COURSES UNDERTAKEN

### • Computer Science

Data Structures and Algorithms, Abstractions and Paradigms in Programming, Automata Theory and Logic, Logic Design, Software Systems Lab, Graph Theory, Computer Architecture\*, Computer Networks\*, Database and Information Systems\*, Natural Language Processing\*, Computer Graphics\*, Compilers\*\*, Operating System\*\*, Artificial Intelligence\*\*

#### • Others

Calculus, Linear Algebra, Differential Equations, Introduction to Numerical Analysis, Modern Physics, Technology and Animation, Economics

### Note:

## INTERESTS AND EXTRA CURRICULARS

- Participated in **Microsoft Appathon Code.Fun.Do** and built a add objects to canvas and write short code to animate them
- Participated in Yahoo HackU and built a chrome extension in 24 hour to gather news, sports and weather data using Yahoo Boss API Yahoo Query Language
- Awarded the 1st Kyu (Brown Belt) in Karate by Shito Ryu Karate-Do Federation
- Active user on online coding forums like HackerRank and SPOJ
- Interested in Web Development, Apps and designing algorithms for various coding problems
- Worked for Abhyasika as teacher for poor kids in National Service Scheme, IITB
- Interested in traveling and have done Parasailing, Trekking, River Rafting, Valley crossing and other activities.

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<sup>\*</sup> to indicate courses which would be completed by Nov'14

<sup>\*\*</sup> to indicate courses which would be completed by Apr'15