



**Ravi Vooda**  
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**Indian Institute of Technology Bombay**

**09005061**  
**B.Tech.**  
**Male**  
**DOB: June 11th 1993**

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2013	6.56
Intermediate/+2	Sai Vikas	Sai Vikas	2009	95.00
Matriculation	Private	Private	2007	91.00

## ACCOLADES

- 71th rank in IIT-JEE 2009 among 400000 students (99.98 percentile)
- 95th rank in AIEEE 2009(B.Arch.) among 500000 students (99.98 percentile)
- 68th rank in NISER-NEST conducted by ATOMIC RESEARCH OF INDIA
- Awarded THE INDIAN NAVY civil employees COOPERATIVE SOCIETY CASH AWARD twice (7th and IIT-JEE)
- Awarded MERITORIOUS SCHOLARSHIP by ADMIRAL SUPERINTENDENT twice (7<sup>th</sup> and IIT-JEE)
- Cleared & studied at Nationally renowned school JAWAHAR NAVODAYA VIDYALAYA

## PROFESSIONAL EXPERIENCE

### BRAVOLUCY

May 2012 – July 2012

Guide: Bhavani Shankar

- Designed clusters of several sports based on commonalities and differences implementing renewal theorem
- Designed a generic software for exhaustive performance and result analysis of various sports giving probabilistic predictions of outcome implementing generic nature
- Developed computational models for probability models such as Poisson, Compound Poisson, Geometric, and Binomial etc.
- Evaluated and analyzed In – Play Models for Football predicting results up to 95% precision

### PRIME TECHNOLOGIES

May 2011 – July 2011

Guide: Santosh Jagtap

- Coordinated with mechanical team to develop Hob Measuring Software for profiling Hobs on .Net Framework
- Adapted Model-View View-Model (MVVM), Reflection, and Windows Presentation Form (WPF) with C# as back end language resulting in reduction in software development time over a month
- Developed a generic API to interface with different mechanical component software's viz. hobs & gears

## ACADEMIC PROJECTS

### Bachelors Thesis PROJECT

Jul 2012 – Nov 2012

Guide: Prof. Purushottam Kulkarni & Prof. Umesh Bellur

- Conducted detailed study of VirtPerf, a Performance Profiling Tool for Virtualized Environments
- Planning to improvise the tool by critical analysis of tool performance under various constraints and environments
- Planning to modify the tool & extend its application to administrative level with feedback mechanism

### SLAVEBOT

Jan 2012 – Apr 2012

Guide: Prof. Kavi Arya

- Designed interactive software for maneuvering a Spark-V Robot with human gestures relative to the bot using a mounted camera on the bot
- Implemented Zigbee for wireless communication, Kinect for gesture recognition and Thread synchronization for generic behavior

### IIT BOMBAY STREETVIEW & STREETVIDEO

Jul 2011 – Nov 2011

Guide: Prof. Sudarshan S

- Designed and developed StreetView that provides panoramic view along the streets of IIT BOMBAY
- Used Breadth Search Tree to generate StreetVideo that streams best possible route between two input points
- Used Adobe flash, HTML, CSS, JavaScript (jQuery, AJAX) for display, ActionScript & PHP as back end languages
- Implemented Normalization principles, Dependencies preservation principles, Database design principles gaining hands on experience on JDBC, Oracle, MySQL, etc. and Relational Calculus
- Implemented modularity approach & API design principles in the application for future development

## CHAT BOT & FILE SHARING CLIENT

Jan 2012 – April 2012

Guide: Prof. Kameswari Chebrolu

- Implemented a command line group chat and file sharing utility using UDP sockets
- Enforced reliability by implementing stop-and-wait protocol ensuring in-order flow of packets, retransmission upon packet-loss in transit

## VIRTUAL MEMORY FOR PRANALI OS

Oct 2011 – Nov 2011

Guide: Prof. D M Dhamdhare

- Developed a working memory management system implementing paging & memory management policies
- Critiqued and analyzed various memory allocation schemes, page replacement policies, memory access schemes, page table policies & swap space implementation schemes

## WEB CRAWLER & WEB SEARCH ENGINE

Jan 2010 – Apr 2010

Guide: Prof. Om P. Damani

- Developed a web crawler with a search engine in C++ using curl library (Average search time: 0.50 seconds)
- Implemented data-structures such as Stack Queue, Priority Queue, Trees and Heaps etc.
- Implemented various search algorithms on a hashed database created and updated by crawler in an epoch manner giving all possible IIT BOMBAY website links containing the keyword

## Gaming interface TOPGUN

Jan 2010 – Apr 2010

Guide: Prof. Amitabh Sanyal

- Developed an interactive console game with user controls and a graphical interface inspired by IBM PC's Top Gun implementing abstractions and optimization techniques
- Used OpenGL for the front end Graphical display and Scheme as back end language

## UNIQUE IDENTITY

Jul 2009 – Nov 2009

Guide: Prof. Phatak Deepak B.

- Developed user interface which used fingerprints taken earlier to track back to a UID in C++ database
- Used duplication detection for attendance, access control and online exams

## POSITIONS OF RESPONSIBILITY

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### WEB DEVELOPER | WEB TEAM SARC

Jun 2010 – Apr 2011

- Created the entire web framework and designed the database for Student Alumni Relations Cell (SARC)
- Designed and maintained the SARC website and helped in the maintenance of iitbombay.org the biggest alumni portal of IIT BOMBAY
- Designed the system for Alumni Student Mentorship Program (ASMP), enabling automation of allotment process and easy handling of the mentor-mentee relationship affairs of 300 students and 500 alumni
- Designed an interface and computerized the data for an event aimed to reconnect with alumni, resulting in the most successful Phonathon, reaching 800+ alumni in US and 250+ in India raising INR 1 million

### COORDINATOR | STUDENT ALUMNI RELATIONS CELL

June 2010 – Mar 2011

- Conducted the iconic i-Race thrice, held simultaneously across the globe, attracting over 1300 participants
- Pioneered Hostel Reunions in 10 hostels simultaneously with participation of 500+ alumni (biggest alumni event)

### WEB DEVELOPER | SUPEZAS

Jan 2012 – Apr 2012

- Developed an E-Commerce website application with Java based backend
- Implemented Spring framework, Hibernate Java persistence framework against various security issues

### WEB DEVELOPER | PORTAL BAZAAR

Sept 2012 – Ongoing

- Developing an online trading E-Commerce website application on HTML, PHP, JavaScript, etc.
- Intend to resolve various security issues, concerning servlet confidentiality and payload, using payment gateways like CCAvenue, modular design resulting in granular secure transactions

## SPECIAL INTERESTS

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### TECHNICAL

- Authored comprehensive paper explaining implementation and execution of server threads of various protocols using process synchronization (Network Simulation – Process Network)
- Developed Firefox add-on(s), thumbnail Preview and Tab organizer, using XML (XUL), HTML, & Javascript

### EXTRA – CURRICULAR

- Have a special interest in Human Psychology, Basketball
- Best Volunteer Phonathon with a record successful call rate of over 100 alumni