



**Jayanth**  
**Computer Science & Engineering**  
**Indian Institute of Technology Bombay**

**100050041**  
**B.Tech.**  
**Male**  
**DOB: 16.08.1992**

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2013	8.16
Intermediate/+2	Delhi Public School R.K. Puram	C.B.S.E.	2010	93.00
Matriculation	DAV Public School	C.B.S.E.	2008	97.20

### SCHOLARSHIPS

**CBSE Merit Scholarship for Professional Studies** for securing **All India Rank 300** (State Rank **29**) in AIEEE 2010  
**Science Olympiad Foundation Scholarship** for securing **All India Rank 9** in National Science Olympiad 2009  
**National Talent Search Scholarship** by National Council for Educational Research & Training for qualifying NTSE 2008  
**Cash Scholarship** worth Rs.36,000 by FIITJEE for securing **All India Rank 18** in FIITJEE Talent Reward Exam 2008

### SCHOLASTIC ACHIEVEMENTS

- Secured **All India Rank 168** in IIT-Joint Entrance Examination 2010 among about 400,000 candidates
- Awarded **Gold Medal** in **Orientation-Cum-Selection Camp for International Chemistry Olympiad** for being amongst the top 36 students in Indian National Chemistry Olympiad 2010
- Awarded **Certificate of Merit (top 1% nationwide)** in National Standard Examination in Physics 2010
- Selected for Indian National Astronomy Olympiad 2009, Indian National Physics Olympiad 2010 and thrice for Indian National Mathematics Olympiad 2008, 2009 and 2010 after clearing the regional olympiads
- Awarded **Hindustan Pratibha Samman** for securing **State Rank 2** in All India Secondary School Exam 2008
- Secured **All India Rank 39, 36, 20** for consecutive years in National Science Olympiad 2006, 2007 and 2008
- Awarded **Silver Medal** in Delhi Inter School Maths Contest in October 2009
- Pursuing **Minor degree** in **Statistics** and **Honors Degree** in Computer Science & Engineering

### INDUSTRIAL EXPERIENCE

#### **Deutsche Corporate and Investment Banking Centre, Mumbai**

*May - July 2013*

**News Analytics**, Guide: Mr. Adithya M R, VP

*Equities and Rates Team*

- Created a database of over **100,000** asset-specific financial news articles over a period of last 5 years by mining websites of major news feed providers using Selenium, Scrapy and pyMongo packages in Python
- Implemented Keyword & Named Entity Extractor, Domain Classifier, News Summarizer and **Sentiment Scorer**
- Developed different trading strategies based on moving averages of news sentiment score and outperformed liquid and volatile underlyings (*Google and Shell*) by more than **2.5%** annualized returns with better Sharpe Ratios
- Proposed a model for inflation index calculation using online retail prices to estimate inflation on a daily basis

#### **Edelweiss Capital, Mumbai**

*December 2012*

**Risk Management System Testing Automation**, Guide: Mr. Akash Agarwal, VP

*Quant Trading and Risk Team*

- Programmed scalable algorithm along with test scenarios using the in-house Java based algorithmic trading platform
- Performed comprehensive testing of pre-trade **Risk Management System** for different segments and order types

### RESEARCH EXPERIENCE

#### **Technische Universitt, Braunschweig, Germany**

*May - July 2012*

**Wiselib**, Guide: Prof. Sandor P. Fekete

*Algorithms Group*

- Ported Wiselib, an algorithms library completely written in C++ for networked embedded devices to **Arduino**
- Implemented all the basic Wiselib concepts - **OS, timer, radio, debug, clock, UART** to enable execution of Wiselib localization and routing algorithms without changing a single line of algorithm code

#### **Electronics Club, IIT Bombay**

*May - July 2011*

- Made a **robotic arm** capable of generating a knowledge base of all the stable positions and using that knowledge to move to the instructed position, abstracting the notion of **self-learning** as learning stimulus response pair
- Fabricated a model of a robotic leg and a balancing platform for implementation

### UNDERGRADUATE DISSERTATION

**Subjectivity Extraction & Opinion Mining**, Guide: Prof. Pushpak Bhattacharya

*July 2013 - Present*

- Aim to solve thwarting and sarcasm detection to increase the accuracy of sentiment classification task
- Surveying the current state of the art in sentiment analysis and presenting papers in weekly group meetings
- Ongoing implementation to develop an online watch group for tracking environmental conditions through **sentiment analysis of geo-tagged textual posts** on the web to identify potential emergency situations and to use the collected information during disasters for improved crisis management

### ACQUAINTANCE BEYOND CORE

Advanced Probability Theory | Statistical Inference | Machine Learning | Derivative Pricing

## POSITIONS OF RESPONSIBILITY

- Campus Ambassador**, Oracle India *May 2013 - Present*
- Planning and hosting Oracle fun events on campus and helping Oracle better understand campus culture
  - Learning about innovative Oracle products and programs and promoting them in campus
- Teaching Assistant**, MA 105 - Calculus *July 2013 - Present*
- Appointed by Prof. I. K. Rana to conduct tutorial sessions for a batch of 42 students from CS and EE departments
- Student Mentor**, Department Academic Mentorship Program *July 2012 - Present*
- Nominated twice for addressing and resolving academic issues of underperforming second and third year students
  - Coordinating with the faculty advisors in handling cases of academic disinclination & depression
  - Helped 3 students in last tenure in identifying areas of development and handling stress, who finally cleared backlogs
- Internship Coordinator**, Placement Office *July 2012 - April 2013*
- Assisted **more than 15** companies and **5** universities in student recruitment process for training and internships
  - Played a key role in formulating new internship policies, coordination, scheduling and acting as an interface between students, institute authorities and companies, leading to an increase in overall internships by **more than 75%**
- Convener**, Vaani - Hindi Club of IIT Bombay *July 2011 - April 2012*
- Organized regular Hindi debating and literary arts workshops to encourage participation in Hindi literary activities
  - Conceptualized and en route published the **first annual Hindi magazine** of the IIT Bombay campus, Spandan
- Coordinator**, TechFest - Technical Festival of IIT Bombay *July 2010 - January 2012*
- Led a team of organizers to ensure smooth execution of the LAN gaming competitions in Gaming Zone
  - Worked as an organizer of Lift-Off competition in freshmen year, which involved a participation of over 80 colleges
- Member**, Delhi Public School Mathematics Society *July 2009 - March 2010*
- Helped in organizing the Mathematical Crusade, an Interschool Mathematics Quiz Contest in Delhi and NCR
  - Conducted workshops for junior students to motivate and encourage participation in Mathematics Olympiad

## KEY ACADEMIC PROJECTS

- Seminar - Game Theory and AI**, Guide: Prof. Pushpak Bhattacharya *February - April 2013*
- Conducted a literary survey on connection between Artificial Intelligence and Game Theory by revisiting economic and game theoretic approaches in view of their use in computation
- Virtual Memory Management**, Guide: Prof. Dhananjay Madhav Dhamdhare *February - April 2013*
- Designed virtual memory for OS/161 by implementing swap space allocation to each process, paging, page loading from swap space, page fault handling, page table maintenance and page replacement policy
- Electronic Trading Platform**, Guide: Prof. Nandlal L. Sarda *October - December 2012*
- Designed a convenient and secured trading platform for transactions in different securities through web interface
  - Implemented interactive features using JSP servlet, Javascript and MySQL to view and manage personal information, portfolio, transaction history, current pending orders, market order book and net worth of assets
- 3D Terrain Graphics**, Guide: Prof. Varsha Apte *October - December 2011*
- Made an application to draw 3D terrain graphics from height maps in C++ using OpenGL graphics library
- ProZip**, Guide: Prof. Amitabha Saniyal *February - April 2011*
- Designed a file compressor in Scheme, which was more efficient than GZip for file sizes less than 20 kB

## EXTRACURRICULAR ACHIEVEMENTS

### **Technical**

- Secured **World Rank 7** and **Asia Rank 1** in HackerRank Quora Machine Learning CodeSprint 2013
- Secured **23<sup>rd</sup>** position representing IIT Bombay at the **Asia Regional Finals** of **ACM ICPC**, Kharagpur 2012
- Awarded **1<sup>st</sup>** prize from Children's Technology Workshop for completing **Lego Robotics Sumo Challenge** 2010
- Secured **3<sup>rd</sup>** position in Arduino Coding Competition 2011 conducted by Electronics Club
- Awarded **Hostel Special Mention** in the field of Technical Activities for the year 2010 - 2011
- Developed geolocation based fare calculator and sentiment based tweet retriever in **Yahoo! HackU** 2012 & 2013
- Built a line-follower robot to finish in top 50 in Loop Rush Competition held at TechFest 2011

### **Cultural**

- Won **3<sup>rd</sup>** prize in Hindi Creative Writing G.C. 2012 and several other accolades for literary arts at institute level
- Scripted and performed as one of the lead actors in the hostel play, bagging **3<sup>rd</sup>** prize in Dramatics G.C. 2011
- Performed a street play on patriotic theme at Mega Mall, Oshiwara as a part of **Thespo** contingent bagging **2<sup>nd</sup>** position on Independence Day 2011
- Performed a street play at Narsee Monji College as a part of the IIT Bombay street play contingent to Umang 2011
- Awarded **Hostel Cultural Color** for excellence in cultural activities for the year 2011 - 2012