



**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

<b>Campus Ambassador</b> , Oracle India	<i>May 2013 - Present</i>
• 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	
<b>Teaching Assistant</b> , MA 105 - Calculus	<i>July 2013 - Present</i>
• Appointed by Prof. I. K. Rana to conduct tutorial sessions for a batch of 42 students from CS and EE departments	
<b>Student Mentor</b> , Department Academic Mentorship Program	<i>July 2012 - Present</i>
• 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	
<b>Internship Coordinator</b> , Placement Office	<i>July 2012 - April 2013</i>
• Assisted <b>more than 15</b> companies and <b>5</b> 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 <b>more than 75%</b>	
<b>Convenor</b> , Vaani - Hindi Club of IIT Bombay	<i>July 2011 - April 2012</i>
• Organized regular Hindi debating and literary arts workshops to encourage participation in Hindi literary activities	
• Conceptualized and en route published the <b>first annual Hindi magazine</b> of the IIT Bombay campus, Spandan	
<b>Coordinator</b> , TechFest - Technical Festival of IIT Bombay	<i>July 2010 - January 2012</i>
• 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	
<b>Member</b> , Delhi Public School Mathematics Society	<i>July 2009 - March 2010</i>
• 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

<b>Seminar - Game Theory and AI</b> , Guide: Prof. Pushpak Bhattacharya	<i>February - April 2013</i>
• 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	
<b>Virtual Memory Management</b> , Guide: Prof. Dhananjay Madhav Dhamdhere	<i>February - April 2013</i>
• 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 maintainace and page replacement policy	
<b>Electronic Trading Platform</b> , Guide: Prof. Nandlal L. Sarda	<i>October - December 2012</i>
• 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	
<b>3D Terrain Graphics</b> , Guide: Prof. Varsha Apte	<i>October - December 2011</i>
• Made an application to draw 3D terrain graphics from height maps in C++ using OpenGL graphics library	
<b>ProZip</b> , Guide: Prof. Amitabha Sanyal	<i>February - April 2011</i>
• Designed a file compressor in Scheme, which was more efficient than GZip for file sizes less than 20 kB	

## EXTRACURRICULAR ACHIEVEMENTS

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