



Jayanth
Computer Science & Engineering
IIT Bombay
Specialization: Computer Science

100050041
B.Tech
Male
DOB: 16.08.1992

| Examination | University | Institute | Year | CPI / % |
|---------------|---|--------------------------------|------|---------|
| Graduation | IIT Bombay | IIT Bombay | 2014 | 8.41 |
| Intermediate | Central Board of Secondary Education (CBSE) | Delhi Public School R.K. Puram | 2010 | 93.00 |
| Matriculation | Central Board of Secondary Education (CBSE) | DAV Public School | 2008 | 97.20 |

SCHOLASTIC ACHIEVEMENTS

- Pursuing Minor degree in Statistics and Honors Degree in Computer Science and Engineering
- Secured an All India Rank of 168 in IITJEE 2010 among the 470 thousands aspirants
- Secured an All India Rank of 323 in AIEEE 2010 among the 1 million aspirants
- Represented IIT Bombay in onsite regional round of ACM ICPC 2012 at Kharagpur region
- 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 Merit Certificate for being placed in National top 1% in NSEP 2010
- Selected for Indian National Physics Olympiad 2010, Indian National Mathematics Olympiad 2010, Indian National Astronomy Olympiad 2009, Indian National Mathematics Olympiad 2009, Indian National Mathematics Olympiad 2008
- Awarded Silver Medal in Delhi Inter School Maths Contest in October 2009
- Awarded Hindustan Pratibha Samman for securing 2nd rank in state in AISSE 2008
- Secured All India Rank of 20 and 39 in National Science Olympiad 2008 and 2007

INDUSTRIAL INTERNSHIPS

News Analytics, Deutsche Corporate and Investment Banking Centre, Mumbai May - July 2013

- Build Keyword Extractor, Entity Extractor, Domain Classifier and News Summarizer
- Implemented News Sentiment Scorer as a voting model between Gaussian Naive Bayes classifier and lexicon based semi-supervised scorer
- Proposed different trading strategies based on moving averages of news sentiment score, which outperformed highly volatile underlyings by giving higher returns at lower risk

Risk Management System Testing Automation, Edelweiss Capital, Mumbai December 2012

- Programmed scalable algorithm using the in-house Java based algorithmic trading platform to perform comprehensive testing of pre-trade Risk Management System for different order types

RESEARCH INTERNSHIPS

Wiselib, Prof. Sandor P. Fekete, Technische Universitt Braunschweig May - July 2012

- Ported Wiselib, an algorithms library for networked embedded devices to Arduino
- Implemented all the basic Wiselib concepts like OS, timer, radio, debug, clock, UART to enable execution of Wiselib algorithms on Arduino based devices

Self-Learning Arm Robot, 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

SCHOLARSHIPS

Merit Scholarship for Professional Studies by Central Board of Secondary Education for securing an All India Rank of 323 in AIEEE 2010

Scholarship (given only to top 10 students) by Science Olympiad Foundation for securing an All India Rank of 9 in National Science Olympiad 2009

National Talent Search Scholarship by National Council for Educational Research and Training for qualifying National Talent Search Examination 2008

UNDERGRADUATE DISSERTATION

Sentiment Aware Disaster Prediction, *Guide: Prof. Pushpak Bhattacharya* July 2013 - Present

- Proposed to develop an Online Watch Group based on web information for tracking environmental conditions through geo-tagged textual posts on the web to identify potential emergency situations and to use the collected information during disasters for improved crisis management

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

- Implemented virtual memory for OS/161 - a simplified OS, designed at Harvard University
- Accomplished tasks include allocation of swap space to each process, loading pages from swap space, page fault handling, maintaining free page list and updating page table

Electronic Trading Platform, *Guide: Prof. Nandlal L. Sarda* October - December 2012

- Designed and developed a convenient and secured platform for transactions in different securities using Java, Javascript, JDBC and MySql
- Implemented interactive features with session security to view 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 by implementing Real time Optimally Adapting Meshes level of detail landscape rendering algorithm
- Did real time computer graphics animation in C++ using OpenGL by prioritizing graphic details using data structures like priority queues, binary triangle trees and Fibonacci heap

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
- Implemented three different algorithms - LZW, Huffman, Shannon - Fano for compressing files and analyzed their efficiency by comparing their compression-ratio

Battle Tanks, *Guide: Prof. D.B. Phatak* October - December 2010

- Led a team to design a game like Pocket Tanks with application interface for single player mode apart from general double player and training modes in C++ using EzWindows library

SKILL SET

Programming Languages: Programming Proficient in C++, C, Python, Scheme, Java
Knowledge of HTML, CSS, javascript, Prolog, LaTeX, GNU Plot and Bash-Scripting

Softwares: MATLAB, Mathematica, AVR Studio, Adobe Packages, Sony Vegas, MS Office

Databases: MySql, MongoDB **Operating Systems:** Windows, Linux

RELEVANT COURSE WORK

Computer Science: Abstractions and Paradigms for Programming, Discrete Structures, Data Structures and Algorithms, Design and Analysis of Algorithms, Automata Theory, Logic Design, Computer Architecture, Computer Networks, Database and Management Systems, Operating Systems, Artificial Intelligence, Implementation of Programming Languages, Linear Optimization

Mathematics: Calculus, Basic Linear Algebra, Differential Equations, Numerical Analysis

Honors Courses: Cryptography, Convex Optimization, Foundations of Machine Learning, Information Retrieval & Mining for Hypertext & the Web, Speech & Natural Language Processing

Statistics Minor Courses: Probability Theory, Statistical Inference, Derivative Pricing

POSITIONS OF RESPONSIBILITY

Campus Ambassador, Oracle India *May 2013 - Present*

- Working closely with Oracle team for planning and hosting Oracle activities in campus and helping Oracle better understand campus culture
- Learning about innovative Oracle products and programs and promoting them in campus

Student Mentor, Department Academic Mentorship Program *July 2012 - Present*

- Nominated for addressing and resolving academic issues of underperforming students
- Coordinating with the faculty advisor in handling cases of academic disinclination & depression

Internship Coordinator, Placement Office *July 2012 - April 2013*

- Responsible for internship and training activities of Computer Science Department
- Played a key role in formulating new internship policies, coordination, scheduling and acting as an interface between student, institute authorities and companies

Convener, Vaani - Hindi Club of IIT Bombay *July 2011 - April 2012*

- Organized regular debating sessions and encouraged participation in Hindi literary activities
- Conceptualized and en route published the first ever Hindi magazine, Spandan of IIT Bombay

EXTRACURRICULAR ACTIVITIES

- Scripted and performed in the hostel play, bagging third prize in Dramatics G.C. 2011
- Awarded Hostel Cultural Color for excellence in cultural activities for the year 2011 - 2012
- Developed a hack "Meter Down" in Yahoo HackU 2012, that determines the fare by locating the current position using Geolocation API and plotting on Google Maps
- Awarded first prize from Children's Technology Workshop for completing Lego Robotics Sumo Challenge in August, 2010
- Secured third position in Arduino Coding Competition 2011 conducted by Electronics Club
- Led a team of organizers to ensure smooth execution and moderation of LAN gaming competitions as a coordinator of TechFest 2012, technical festival of IIT Bombay
- Awarded Hostel Special Mention in the field of Technical Activities for the year 2010 - 2011
- Helped in organizing Mathematical Crusade 2010 as a member of DPS Mathematics Society