



Hasan Kumar Reddy Alugubelly
Computer Science & Engineering
Indian Institute of Technology, Bombay
Specialization: Computer Science and Engineering

09005065
UG Third Year (B.Tech.)
Male
DOB: 10/05/1992

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	8.51
Intermediate/+2	Board of Intermediate Education	Sri Sai Vikas Junior College	2009	97.30
Matriculation	Board of Secondary Education	SPR School of Excellence	2007	92.50

SCHOLASTIC ACHIEVEMENTS

- Secured **All India Rank – 35 in IITJEE**, an exam which was given by over 300,000 students all over the country
- Secured All India **4th** rank (B.Arch) and **92nd** (B.Tech) out of more than 900,000 students appearing for All India Engineering Entrance Examination -2009 (**AIEEE-2009**)
- Secured **35th** rank in EAMCET, Engineering Entrance Exam
- Awarded a **Gold Medal** and selected for OCSC (Orientation cum Selection Camp) **Chemistry Olympiad 2010** (top 30 among 35000 students)
- Selected for OCSC (Orientation cum Selection Camp) **Astronomy Olympiad 2009, 2008** (top 30)
- Selected for the National Level **Physics Olympiad** (Top 1% in the country) 2008,2009
- Received Kishore Vaigyanik Protsahan Yojana (**KVPY**) scholarship, by Department of Science and Technology, Government of India
- Received National Science Talent Search Exam (**NTSE**) scholarship, given by NCERT, New Delhi
- Secured **All India 1st** Rank in 9th National Science Olympiad (2007)
- Received a **gold medal** for two consecutive years (2006, 2007) in Sir C V Raman Young Genius Awards
- Secured **State 2nd** rank **three times** in the talent test conducted by Dr. A S Rao Awards Council

AREAS OF INTERESTS

- Computer Graphics and Image Processing
- Genetic Algorithms , especially related to bioinformatics and computation
- Web Application Development, designing and optimization, Data mining
- Algorithm Design and Analysis
- Functional Programming, Artificial Intelligence

PROGRAMMING SKILLS

- PROGRAMMING SKILLS:**
 - C/C++, Java , Scheme
 - Basics of Prolog, Haskell, Perl, Ruby, Python
- SOFTWARE SKILLS:**
 - Latex, MS Office, Open Office
 - Matlab, Scilab, LTspice, Photoshop
- WEB DESIGNING:**
 - HTML, CSS, Javascript, jQuery,
 - Ajax, PHP, MySQL, YQL, Java Applets and Servlets
 - Frameworks: Ruby on Rails, yii, cakephp
 - CMS: Drupal, Joomla, Wordpress
 - Have tried my hands developing applications using various APIs like facebook, yahoo!
- WEB TESING:** Selenium, Watir, Cucumber, Capybara, Webrat, Unit
- OPERATING SYSTEM:** Linux, Windows

PROJECTS

- **Fingerprint Analysis:**
Converted fingerprint images(.xpm) to grayscale, thinning and finally pattern recognition. Done as a course project for Computer Programming and Utilization under Prof Deepak B.Phatak. Implemented using C++.
- **n^2 – puzzle or Sam-Loyd Puzzle:**
It is similar to sliding puzzle where numbers are to be arranged in increasing order. Implemented it using A* graphsearch algorithm with several optimizations to give the shortest path. Done as a course project for Abstractions and Paradigms Lab under Prof A. Sanyal. Implemented in Scheme.
- **Web crawler cum search-engine:**
Used curlib to crawl the web pages given the seed and penetration levels, indexed the source code with help of boost regex library and the used various data structures to efficiently return the results given a query. Done as a course project for Algorithms and Data Structures Lab under Prof O.M.Damani. Implemented in C++.
- **Web Application using RoR and Testing:**
During my summer intern at Chronus Corporation, Chennai I was part of team developing a huge project using Ruby on Rails. I also got familiar with various Web UI Testing tools like Selenium, Watir, Cucumber, Capybara , Process monitor tools like monit, cron , document extraction using headless openoffice and using Amazon S3, EC2 instances.
- **As a Core Team Member, SARC:**
Built the Alumni Student Mentorship Program (ASMP) Interface using yii PHP framework. ASMP provides students a platform for one to one interaction with our esteemed alumni. As a part of webteam, last year we made a website using drupal CMS. I am also responsible for maintaining website and various interfaces which come under Student Alumni Relations Cell (SARC).
- **Yahoo Hack U 2010:**
Participated in Yahoo Hack U 2010 and built a hack (id=1429) Flickr Album Download. Currently flickr doesn't provide interface for downloading multiple images. The aim of this Hack is to provide such a feature. My deck can be found at [http://home.iitb.ac.in/~hasankumar_reddy/hackU/album_download/Flickr Album Download.pdf](http://home.iitb.ac.in/~hasankumar_reddy/hackU/album_download/Flickr%20Album%20Download.pdf)

COURSES TAKEN

- Core Courses
 - ✓ Operating Systems*
 - ✓ Database and Information Systems*
 - ✓ Computer Architecture*
 - ✓ Data Structures and Algorithms
 - ✓ Discrete Structures
 - ✓ Design and Analysis of Algorithms
 - ✓ Automata Theory and Logic
 - ✓ Abstractions and Paradigms
 - ✓ System Specification and Implementation
 - ✓ Software systems lab
 - ✓ Logic Design
 - ✓ Computer Programming and Utilization
 - Breadth Courses
 - ✓ Introduction to Numerical Analysis
 - ✓ Linear Algebra
 - ✓ Introduction to Electrical Circuits
 - ✓ Differential Equations
 - ✓ Data Analysis and Interpretation
 - ✓ Calculus
 - ✓ Economics
 - ✓ Modern Physics
 - ✓ Introduction to Aerospace Engg.*
 - ✓ Mechanical Workshop
 - ✓ Engineering Drawing
 - ✓ Environmental Studies
 - ✓ Basics of Animation
 - ✓ Sociology
 - ✓ Chemistry
- * Ongoing Course

EXTRA-CURRICULAR ACTIVITIES

- Working as a **Core Team Member, Web and Softwares** of Students Alumni Relations Cell (**SARC**), IIT Bombay
- Worked as **Hostel 5 web secretary**. Responsible for construction and maintenance of Hostel Website.
- Worked as an organizer in **Lecture Series, Techfest 2010 & Entrepreneurship Summit 2010**
- Acted in a **Streetplay** in Performing Arts Festival (PAF) which was nominated to be the 'Gem of the PAF'
- Received B certificate in **NCC (2nd MAH ENGR REGT)**. Attended the adventure cum training camp