



Aashay Harlalka
Computer Science & Engineering
Indian Institute of Technology, Bombay
Specialization: None

100050035
UG Third Year (B.Tech.)
Male
DOB: 6 Oct. 1992

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	8.85
Intermediate/+2	CBSE	Vidya Niketan Sr. Sec. School	2010	92.00
Matriculation	CBSE	Kendriya Vidyalaya No.1, Udaipur	2008	92.40

ACADEMIC ACHIEVEMENTS

- Secured **All India Rank 31** in IIT-JEE 2010 among 472,000 students
- Awarded **Certificate of Merit for top 1%** of candidates in National Physics Olympiad (2010)
- Secured **International rank 41** in International Mathematics Olympiad organized by Science Olympiad Foundation
- Secured **All India Rank 375** and **State Rank 65** in AIEEE 2010 among more than 1 million students
- Secured **100%** marks in **Mathematics** in Matriculation (2008)
- Kishore Vaigyanik Protsahan Yojana (KVPY)** (2009-10)
 Awarded KVPY scholarship, scholarship given by Government of India at undergraduate level for promoting Science, Education and Research
- SBI Scholarship** (2010-to date)
 Recipient of SBI scholarship awarded to meritorious children of SBI employee
- Vijyoshi (Vigyan Jyoti Shibir)** (2009)
 Attended Vijyoshi, organized by the Jawaharlal Nehru Centre for Advanced Scientific Research in association with Kishore Vaigyanik Protsahan Yojana (KVPY)

INDUSTRIAL EXPERIENCE AND RELEVANT PROJECTS

- Claritics Social Gaming Analytics** (Internship, Summer 2012)
 - Created **API Layer** for ingesting gaming events and **client Libraries** to make it easy to collect relevant event data for social games. Developed **client Libraries** in Android, Java, HTML5
 - These API then write out to the **MYSQL database** that house the raw incoming event feeds.
 - Final data is well presented on the gaming dashboard and reports
 - Data Buffering**- enhanced the libraries to pool the events in a memory queue, which is then dispatched onto the database by a background thread not disturbing UI
 - Created **API** (in Ruby on Rails) to recommend virtual goods to users
- Mexus Education Pvt. Limited** (Internship, Winter 2011)
 - Worked at department of **Research and development of product**
 - Prepared special papers for **Ikenscientifica** (international level competition for class 8th and 9th), many activities, questions and other study material to enhance their interest and knowledge in science
- Desktop Search (C++)** (Autumn 2011)
 Guide- Prof. Varsha Apte, Department of Computer Science and Engineering, IIT Bombay
 - Search for relevant information of all the files in a folder matching the enquired keyword(s)
 - Made a **crawler** (indexer) which crawls the whole given folder and build an index for that
 - Implemented **B-Tree** and used **Taglib** package to store meta data of MP3 files
 - Dealt with **huge data** (worked with **150 GB** of data with more than 50,000 files) as disk memory is used instead of heap memory
- Discrete Simulation (C++)** Guide- Prof. Varsha Apte, Department of CSE (Autumn, 2011)
 - Advanced **multi-queue simulation** in a supermarket calculating all statistical quantities like average waiting time, average queue length, average service time, average server busy time, etc.
- Bombberman (PLT Scheme)** (Spring 2011)
 Guide- Prof. Amitabh Sanyal, Department of Computer Science and Engineering, IIT Bombay
 - Designed and Implemented a **single player game** using **GUI Libraries** offered by Dr. Scheme
 - Used **A-star** algorithm as Artificial Intelligence for finding the shortest path
 - Multiple parallel events handled by **Threading**

- **Intel 8085 Simulator** (C++) (Autumn 2010)
Guide- Prof. D. B. Phatak, Department of Computer Science and Engineering, IIT Bombay
 - Followed **object oriented approach** to develop a simulator package for Intel 8085 assembly instruction. Designed using Qt 4 **GUI libraries** in GNU C++ 4.4.5
 - Includes an editor, compiler, parser, interpreter and debugger which could show every execution step, hexadecimal conversion of the code and its effect on microprocessor's registers

SOFTWARE SKILLS

Programming Languages: C/C++, Java, Android, Scheme, SWI Prolog, MATLAB, Latex

Web Designing: HTML, CSS, JavaScript, PHP, MYSQL

Tools: Adobe Photoshop, Android SDK, Java GUI, JDBC, Eclipse, Netbeans, Bash Scripting, SVN

RELEVANT COURSES

Computer Science: Computer Programming and Utilization, Abstraction and Paradigms for programming, Data Structures and Algorithms, Discrete Structures, Automata Theory and Logic, Logic Design, Design and Analysis of Algorithms, Computer Architecture*, Database and Information System*, Computer Networks*, Computer Aided Geometric Design*

Mathematics and Statistics: Calculus, Linear Algebra, Data Analysis and Interpretation, Differential Equations, Numerical Analysis, Probability Theory, Introduction to Derivative Pricing, Statistical Inference*

*to be completed by November 2012

POSITIONS OF RESPONSIBILITY

- **Co-ordinator, Techfest'12** (IIT Bombay's annual technical festival)
 - Worked as Co-ordinator in Hospitality department
 - handled accommodation of over 4000 people
- **Co-ordinator, E-cell'12**
 - Worked as Co-ordinator in Web Development Department
 - Responsible for maintaining and developing the content of website
- **Organizer, Techfest'11**
 - Worked in Infrastructure dept. and handled infrastructure requirement of various events during Techfest

EXTRA CURRICULAR ACTIVITIES

- **National Service Scheme (NSS)**, IIT Bombay
 - Member of Personality Development Program and Group for Rural Activities
 - Visited 2 villages to understand their living conditions
- RC motor **remote-controlled car** (2010)
 - Remote Sensor Car using RC circuit capable of climbing inclines and overcoming obstacles on the track. Made the car water resistant using low cost material
- Completed **Youth Empowerment and Skills workshop** offered by art of living
- Cleared first level and made a boat in **Junkyard Wars** organized in Techfest'11
- Secured 4th position in intra hostel **photography competition** (2010)

CODING

- Certified **Yahoo! Ethical Hacker**
 - Designed an innovative product which analyses your friend's online activity and give us graphs about when he/she generally comes online

SPORTS

- Played as goalkeeper in the **GC** (General Championship) **winning Football** Team. (2011)
- Received **best goalkeeper** award in football in Hostel Three Premier League (2010)
- Played in hostel freshmen and sophomore **football** and freshmen **volleyball** GC (General Championship)