Aseem Raj Baranwal

B.Tech. 3 rd Year, Computer Science
Indian Institute of Technology Jodhpur

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Educational Background

Examination	Institution	Year	CPI / %
Undergraduate	Indian Institute of Technology Jodhpur	2014*	8.67
Intermediate C.B.S.E.	Delhi Public School Ghaziabad	2012	94.0
Matriculation I.C.S.E.	St. Mary's Convent School	2010	93.2

(* - expected to be completed in 2016)

Skills and Expertise

- **Programming Languages**

Significant experience with	Python, C, C++, JavaScript, PHP, HTML
Familiarity with	Ruby

- **Specific Tools and Technologies**

Client Side	AJAX, jQuery
Server Side	LAMP, WebSockets, Google App Engine (Python SDK)
MVC Frameworks	Python-Django (proficient), Ruby-Rails (familiar)
Databases	MySQL, MongoDB, Redis.io
Platforms	Node.js, Octave
Version Control	Git, Mercurial

Achievements and Activities

Present Open-source contributor to **Mozilla** and **Duckduckgo**.

Mar 2015 National rank **41**, Global rank **118** on codechef.com

Mar 2015 National **team rank 23** at Microsoft **Build the Shield – CTF 2015**, held by **Microsoft Corporation, India**.

Dec 2014 Qualified for **ACM ICPC 2014 Asia Regionals** at IIITM Gwalior site.

Dec 2013 Qualified for **ACM ICPC 2013 Asia Regionals** at IIT Kharagpur site.

Mar 2014 National **team rank 15** in Microsoft **Hackcon – CTF 2014** held by **Microsoft Corporation, India**.

Feb 2014 Participant at **KDE conf India**.

Sep 2013 Participant at **JS Conference**, IHC Delhi.

May 2013 **1st rank** in **Data Structures, Algorithms** and **Advanced Algorithms** course in a class of 146 students.

2013-14 Coordinator, Programming Club IIT Jodhpur

Projects and Experience

Commingle (MIT Media Labs): • Designed a system for making learning experience more comfortable for all categories and age-groups of people. • Mentors: Juliana Nazare, MIT	[Jan 2015]
Research Work Intern (Graph Algorithm): • Devised a linear time algorithm for computing a minimum distance total k- dominating set in interval graphs. • Co-authored a *research paper* for the same, submitted to Discrete and Applied Mathematics Journal.	Dr. Dinabandhu [June 2014]
Code Judge (Node.js and Python-Django): • Developed a code judge application in the *master-slave* fashion. • Implemented job scheduling for load balancing on the slaves. • *MySQL* Database used to store users data and problems. • The judge is scalable and can be modified into an *API*. • Github URL: http://github.com/aseemraj/judge-v2	Dr. Gaurav Harit [July 2014]
Train Traffic Simulator (In Python): • Implemented *scheduling algorithm* to schedule the arrival and departure of trains on the available platforms. • The scheduler takes into account the priority order of the trains. • Changing time elapse rate and current simulation time enabled. • *MongoDB* Database used for storing the schedule of trains. • Github URL: http://github.com/aseemraj/tkintertrain	Dr. Gaurav Harit [Aug 2014
Web Chat Application (In Node.js): • Used *Express.js* and *Socket.io* libraries. • Facilities include online user list, geolocation and room creation. • Used sockets for the asynchronous communication between chat clients and server. • Github URL: http://github.com/aseemraj/nodechat	[June 2014]
Elevator Simulator (In Python): • A 10 floor, 4 elevator system simulation with all features. • Implemented an algorithm to optimize commuting time. • Implemented weight sensors, call buttons, and panel buttons. • Github URL: https://github.com/aseemraj/elevator	Dr. Gaurav Harit [Sept 2014]
Games: • Carrom: Implemented the physics and geometry involved with the game play. Github: https://github.com/aseemraj/carrom • Word Muddle: A word unscramble game, hosted on the Windows appstore. Github: https://github.com/aseemraj/wordmuddle	[Sept 2014] [June 2014]
Google App Engine: • Web Scraper: A tool to scrape web pages and collect images, articles or any desired data. • Jumble Solve: Unscrambles jumbled words into meaningful words and phrases. App is live here	[July 2014]