

Aseem Raj Baranwal

Final Year Undergraduate

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EDUCATION

Degree / Examination	University	CPI / Percentage	Year
B. Tech. in Computer Science	Indian Institute of Technology Jodhpur	8.67 / 10	2012 - Present
AISSE - 12 th	Delhi Public School Ghaziabad	94 %	2012
CISCE - 10 th	St. Mary's Convent School Ghaziabad	93.2 %	2010

INTERNSHIP AND PROJECTS

- **Summer Internship at Microsoft India R&D** *(May - July 2015)*
 - Designed a time based resource allocation scheme for virtual machines using a VMWare vCenter Server
 - Developed a web interface for developers and testers to create and use VMs
 - Language/Tools: C#, Visual Studio, MySQL, Powershell, VCenter, HTML, JavaScript
- **Bandwidth Guarantee in Data Center Networks** | B. Tech Project *(September 2015 - Present)*
 - Surveying about proposed solutions to existing bandwidth problems in data centers
 - Attempting to design and implement a network resource allocation scheme to increase the productivity in a datacenter by providing bandwidth guarantees to tenants
 - Considering maximum utilisation of network resources, as well as reliability of services offered to tenants
- **Dominating Set in Interval graphs** | Research Internship *(May - June 2014)*
 - Devised a linear time algorithm for computing a minimum distance total k-dominating set in interval graphs
- **Code Judge** *(May 2014)*
 - Developed the web UI using Python-Django framework to fetch user submissions, make database updates, build the leaderboard and deliver results in collaboration with the judge
 - The judge is an IO bound platform built on node.js which implements job scheduling in master-slave fashion
- **Neural Network Learning** *(October 2014)*
 - Implemented back propagation algorithm and applied it on hand-written digit recognition
 - Trained the neural network on a data set and obtained a test accuracy of 92%
- **Railway Traffic Scheduler** | Course Project *(September 2014)*
 - Designed a scheduling algorithm to schedule the arrival and departure of trains on a station
 - Station platforms and outer lines taken as resources for trains
 - Language/Tools: Python-Tkinter, MongoDB

ACHIEVEMENTS

- Team qualified for **ACM ICPC Asia 2014 Regionals** at IIITM Gwalior
- Team qualified for **ACM ICPC Asia 2013 Regionals** at IIT Kharagpur
- Active on [codeforces](https://codeforces.com/) (rating: **1923**) and [codechef](https://www.codechef.com/) (best global rank: **54**)
- Selected among 300 students nationally for **MIT Media Lab** workshop 2015
- National team rank **22** in InCTF 2015 Hacking Contest (Qualified for finals)
- National team rank **19** in Microsoft India CTF 2015
- National team rank **15** in Microsoft India CTF 2014

OTHER ACTIVITIES

- Author of the blog: thefermion.wordpress.com
- Attended KDE Conference 2013 at DA-IICT Gandhinagar
- Participant at JS Conference 2012 at IHC New Delhi
- Coordinator, Programming Club IIT Jodhpur for the year 2013-2014