

# Aseem Raj Baranwal

Final Year Undergraduate

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## EDUCATION

- B. Tech. in Computer Science | Indian Institute of Technology (CPI 8.67/10)
- AISSCE – 12<sup>th</sup> | Delhi Public School Ghaziabad (94 %)

## EXPERIENCE AND PROJECTS

- **Internship at Microsoft India R&D** | May - July 2015
  - Designed a time based resource allocation scheme for virtual machines
  - Developed a web interface for developers and testers to create and use VMs
  - Language/Tools: C#, MySQL, ASP.NET, PowerShell, VCenter, JavaScript
- **Bandwidth Guarantee in Data Centre Networks** | Sep 2015 - Present
  - Surveyed about proposed solutions to existing bandwidth allocation problems in data centers
  - Developing an intelligent dynamic algorithm to heuristically allocate bandwidth to applications in case of server faults and introduction of new applications in the system
- **Dominating Set in Interval Graphs** | May 2014
  - Devised a linear time algorithm for computing a minimum distance total k-dominating set for interval graphs under the guidance of Dr Dinabandhu Pradhan
- **Code Judge** | (May 2014)
  - Developed the web UI using Python-Django framework to fetch user submissions, make database updates, build the leader-board and deliver results in collaboration with the judge
  - The judge is an IO bound platform built on node.js
- **Collaboard** | September 2014
  - Used Node.js with Express.js and Socket.io
  - Implemented a multi-user chatroom system with an additional canvas for collaborative sketching by multiple users in a chat room simultaneously

## ACHIEVEMENTS

- Team qualified for **ACM ICPC Asia Regionals 2013, 2014 and 2015**
- Active on [codeforces](https://codeforces.com/) (rating: **1949, master**) and [codechef](https://www.codechef.com/) (best national rank: **18**)
- Selected among 300 students nationally for **MIT Media Lab** workshop 2015
- National team rank **22** in **InCTF 2015** Hacking Contest
- National team rank **19** and **15** in **Microsoft CTF 2014** and 2015

## SKILLS

- Programming Languages: C, C++, Python, JavaScript, C#, PHP
- Platforms and Frameworks: Node, Octave, Django, ASP.NET