

AYUSH GUPTA



ACADEMIC DETAILS							
Year	Degree / Exam	Institute	GPA / Marks(%)				
	B.Tech and M.Tech in Computer Science & Engineering	Indian Institute of Technology Delhi	8.127				
2014	Maharashtra State Board Of Secondary & Higher Education	Dinanath Junior College	90%				
2012	Indian Certificate of Secondary Education	Seventh Day Adventist High School	90.3%				

QUALIFYING EXAMS

JEE Rank: 99 (GE)

SCHOLASTIC ACHIEVEMENTS

- Asian Physics Olympiad: Bagged Bronze medal for India at APhO held at NUS, Singapore in 2014.
- **National Olympiads**: Awarded Gold Medal and Certificate of merit for being in the top 35 of the country in both Physics and Chemistry Olympiad by HBCSE, Mumbai.
- Kishore Vaigyanik Protsahan Yojana (KVPY Scholar): Secured All India Rank-14 and was awarded fellowship by IISc, Bangalore
- IITD Semester Merit Award : Awarded for being in top 7% Students of the Institute.
- SCRA: Secured All India Rank 2 in SCRA (Special Class Railway Apprentice) Examination 2013-14 conducted by UPSC (Union Public Service Commission).

PROJECTS

Course Projects

• Article Classification into Newsgroups :

Used supervised learning to classify 1470 articles into 8 newsgroups with an accuracy of 85%.

• Mini Search Engine :

Used inverted-indexing; implemented using Hashmaps and AVL Trees; phrases, complex queries can be made.

• Sudoku game for Google App Engine :

Game consisted of Sudoku generator (varying difficulty), Solver (backtracking); fully coded in Javascript.

• Peer to Peer Multiplayer Ping Pong game :

Used Swing library for the Graphics; implemented Socket programming for the communication between players.

• Compiler for an Imperative Language :

Made Scanner, Parser and BigInt Library in SML; used purely functional programming paradigm.

• Grievance Resolution App :

Devised Restful APIs in the Codeigniter framework of PHP; App UI consisted of drawers and sliders.

• Pipelined ARM processor :

Implemented a five stage pipeline in VHDL; ARM assembly could be compiled on it.

• Carrom Board Simulation Game :

Implemented in C++; Used OpenGL for Graphics; Incorporated Oblique collisions, friction, multiple coins.

• Calculator on Embest Board :

Implemented Arithmetic, Assign, Recall operations; handled overflow; fully coded in ARM Assembly Language.

Internships

Loughborough University(UK) (May, 2016 - July, 2016) :

Emotions and Meanings in Dance Movement

- Developed a tool to simulate Human Body movement in 3D using quaternion data of IMUs to be used to extract meaning from body patterns; Technologies used: MATLAB, Kinect, Tortoise SVN.
- Summer Project under Prof. Subhashis Banerjee (May, 2015 July, 2015) :

Campus Rover, simplifying campus navigation

 Developed a web application to facilitate navigation and provide information about various facilities inside the IIT Delhi campus; Used PHP, Javascript, Google Maps and Custom Search APIs.

COURSES DONE

Data Structures And Algorithms, Discrete Mathematical Structur, Digital Logic & System Design, Computer Architecture, Programming Languages, Design Practices, Calculus, Linear Algebra & Diffe. Equa., Probability & Stochastic Pro..

TECHNICAL SKILLS

- Programming Languages: C++, Java, Python, Bash Scripting, Standard ML, R, C#, ARM Assembly.
 Web: PHP, Codeigniter framework, HTML5, CSS3, XML, Javascript, Bootstrap, Jquery.
- Softwares: MATLAB, Android Studio, Visual Studio, Xilinx, LTSpice, Unity5, Autodesk Inventor.
 Other: Github, Google App Engine, Tortoise SVN, Latex.

EXTRA CURRICULAR ACTIVITIES

• Economics:

- o Capital One Event:Came 1st in Strategy game; invested in right areas to maximize a desired variable.
- Mock Stocks Event: Secured 3rd Place in Mock stocks organised by Economics Club, IIT Delhi in Tryst 2015.
- Rev It Up: 1st Position in Case Study event of Economics fest(Das Capitol) at St. Stephens College.

• Competitive Coding:

- Aerobot: 1st Position in the Robozzle Puzzle Event by ACES ACM in Tryst,2016.
- Import Frosh: 2nd Position in 2-hour Coding Competition of CSE Students.
- o Algorithms Event: 3rd position in the event organised by Coding Club, IIT Delhi in Tryst 2015.

· Hackathons:

- o Microsoft's Code Fun do: Developed games on Visual Studio and Unity in a team of 4 people.
- Nutanix Hackathon: Developed application to reduce communication gap between lawyers and clients.

POSITIONS OF RESPONSIBILITY

- Technical Editor at Board of Student Publication (Jun, 2015 Jun, 2016):
 Designed Magazines, Newsletters and Maintained BSP Website; worked in organizing team of Literati.
- Content Executive at the Alumni Association and International Programme (Jun, 2015 Jun, 2016): Interviewed Foreign Exchange Students for Testimonials in Brochure; Wrote Articles for AAIP Magazine.
- Hostel Hindi Samiti Representative (Jun, 2015 Jun, 2016):
 Held Hostel Practise Sessions to improve hostel performance; Publicized and Organized Samiti events

OTHER INTERESTS

Hollywood Movies, Listening to Music (Tropical House), Cricket (Rahul Dravid Fan)