Ayush Gupta

Sophomore, Computer Science

D-44, Aravali House
IIT Delhi, New Delhi 110016
✆ *+91 8130074335*
✉ *ayushabg@gmail.com*

Education

2014–2018	**Bachelor of Technology in Computer Science and Engineering**, *IIT Delhi*. CGPA – **9.23**
2012–2014	**Senior Secondary**, *Higher Secondary Certificate Examination(HSC)*, Percentage - 90.0. **Top 1%** in Maharashtra
2012	**Secondary**, *Indian Certificate of Secondary Education Examination (ICSE)*. Percentage - **90.3**

Achievements

Institute Merit Award	Was placed among the **top 7 percent** of IIT Delhi in the first semester of the 1st year (2014-2015).
APhO 2014	Represented India at the 15th **Asian Physics Olympiad (APhO)**, 2013 and secured **Bronze medal**.
KVPY	Secured **All India Rank 14** in **KVPY** (Kishore Vaigyanik Protsahan Yojana) Exam 2012 conducted by the IISc, Bangalore and was awarded Fellowship in the Science Stream.
IIT-JEE 2014	All India Rank **99** in IIT-JEE Advanced 2014 exam among 150,000 students qualified to take the JEE Advanced, selected out of over 1.3 million students who took JEE-Mains exam.
IPhO	Qualified for the Orientation cum Selection Camp for the **International Physics Olympiad** 2013 for being in the **top-35 in India**.
IChO	Qualified for the Orientation cum Selection Camp for the **International Chemistry Olympiad** 2013 for being in the **top-35 in India**.

Projects

Ongoing	**App to convert text in image to speech:**

- Implemented preprocessing techniques such as local adaptive thresholding, deskewing, noise filtering on colour images.
- Used Tesseract Open Source library to perform OCR on preprocessed image.
- Used Google text to speech and translate APIs to obtain audio from image.

October 2015	**Search Engine:**
	○ Developed Java engine to search in a set of pages using given relevance function.
	○ The search engine was capable of searching for a single word as well as complex queries such as a phrase, any of the given keywords, or all of the given keywords
	○ Implemented Hashmaps and balaced binary search trees as part of the engine.
September 2015	**Article Classification into newsgroups:**
	○ Implemented a Naive Bayes Classifer in java to classify an article into 8 newsgroups (supervised learning).
	○ The algorithm was able to classify 1470 test articles with an accuracy of 96% in 3ms.
September 2015	**Web service to connect lawyers to clients:**
	○ Developed application to reduce communication gap between lawyers and clients.
	○ Developed secure backend using codeigniter3 framework to protect against SQLi and XSS attacks.
August 2015	**Sudoku game for Google App Engine:**
	○ Developed a Sudoku game of 3 different levels of difficulty and deployed it on the Google App Engine.
	○ The game consisted of a sudoku generator (for generating sudokus of varying difficulty), sudoku solver (using backtracking), and the game UI which was written in python.
Summer 2015	**Website and App for facilitating easy navigation in IIT Delhi campus:**
	○ Developed a web and mobile app to facilitate navigation and provide information about various facilities inside the IIT Delhi. campus
	○ Used PHP, Javascript, Google Maps and Custom Search APIs.

▬▬▬ Relevant Courses Taken

Ongoing	Data Structures and Algorithms, Probability and Stochastic Processes, Discrete Mathematical Structures, Digital Logic and Hardware Design
Complete by Summer 2016	Principles of Artificial Intelligence, Programming Languages, Computer Architecture
Completed	Introduction to Computer Science, Introduction to Electrical Engineering, Linear Algebra and Differential Equations, Calculus
Online(self)	Introduction to Machine Learning

▬▬▬ Technical skills

Programming Languages	C++,Java :proficient, python,VHDL:intermediate
Interests	Machine Learning,Algorithms

Web	Codeigniter, PHP, mySQL, javascript, jQuery, CSS3, HTML5,Bootstrap
Software	Xilinx ISE,Autodesk Inventor,Adobe PhotoShop , Adobe Indesign , LTSpice, Android Studio
Miscellanous	Google APIs (Custom Search, Maps, Translate, Text to speech), Google App Engine, git

Extra Curricular Activities

2014-present **Competitive Coding**
- Came 2nd in the Import Frosh Coding Contest of IIT Delhi Freshers.
- Competed as a team of 2 and qualified in the Top -500 teams in the world in the 3rd round of Codechef Snackdown, 2015.
- Competed as a team of 2 in the algorithm contest "Algorythm" at Tryst 2015, IIT Delhi, securing 3rd position.

2014-present **Economics**
- Came 3rd in Mock Stocks Event of Economics Club in Tryst Fest IIT Delhi.
- Came 1st in Rev It Up contest at Economics fest(Das Capitol) of St.Stephens College.

Extra Curricular Activities

July'15-present **Technical Editor of the Board of Student Publication,IIT Delhi**
- Designed the Freshers magazine(Inception),Tech. magazine(Sync) and Newsletter.
- Worked for the designing team of Literati Fest (Biggest Literature fest of India).

July'15-present **Content Executive at Alumni Asso. and Inter. Programme**
- Wrote Article On the Silver Reunion and Facebook posts for Sarthy Startup.

July'15-present **Hostel Representative for Hindi Samiti Club**
- Held Hostel Practice and made Questions for Comp. Events.

July'08-July'09 **Head Boy at BVM,Ashti,Nagpur**

July'07-July'08 **House Captain of Lily House at BVM,Ashti,Nagpur**