Ayush Gupta

Junior Undergraduate | http://www.cse.iitd.ac.in/ cs5140281/
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EDUCATION

IIT DELHI
B.Tech. and M.Tech. (Dual Degree) in Computer Science
Expected June 2019| New Delhi, India
Junior Undergraduate
Cum. GPA: 8.14/10

COURSEWORK

UNDERGRADUATE
Software Design Practices
Programming Languages
Analysis and Design of Algorithms
Machine Learning
Artificial Intelligence
Discrete Mathematical Structures
Computer Networks
Computer Architecture

SKILLS

PROGRAMMING
Over 5000 lines:
Java • C++ • Python • MATLAB
Familiar :
Javascript • SML • R • ARM
Technologies:
Android • Codeigniter • Linux and Bash Scripting • MySQL • VHDL

LINKS

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Github:// **ayushgupt**
LinkedIn:// **ayushgupta12**
YouTube:// **ayushgupta**
Twitter:// **@ayushabg**
Quora:// **Ayush-Gupta**

LINKS

POSITIONS

Student Publication IITD
Technical Editor
Alumni Association
Content Executive
HINDI SAMITI
Hostel Representative

EXPERIENCE

LOUGHBOROUGH UNIVERSITY |Summer Research Intern
May 2016 - July 2016| Under Prof. Massimiliano Zecca
Developed Code in Matlab to simulate Human movement in 3D using quaternion data of IMUs to extract meaning from body patterns; Also made code to visually and graphically check the correct caliberation of IMU.

PROJECTS

MULTIPLAYER PING PONG GAME | Sockets, Swing, Peers
Spring 2016 | Prof. Vinay Ribeiro
Implemented a robust Peer to Peer network in Java with protocols to avoid game failure on player disconnection, by seamlessly switching to AI bots when a player left the room. Added intelligent ball tracing bot players.

COMPLAINT MANAGEMENT PORTAL | Android, Codeigniter
Spring 2016 | Prof. Vinay Ribeiro
Devised Restful APIs in the Codeigniter framework of PHP for registering and viewing complaints, upvotes, comments, search filters; Made App UI using drawers and sliders in Android Studio.

AI BOT FOR TAK GAME | Alpha-Beta, TD-Learning
Fall 2016 | Prof. Mausam
Designed a competitive bot in C++ for a Strategy Game TAK, using minimax tree search and alpha-beta pruning. Used Temporal Difference Learning for assigning weights to features for better heuristic.

MINI SEARCH ENGINE | Java, Data Structures, OOP
Fall 2015 | Prof. Amitabha Bagchi
An Engine that maintains an Inverted Page Index of Webpages using Hash-Maps and AVL Trees which allowed to increase the Search Speed of the Queries.It was capable of searching for a single word as well as phrases.

MNIST DIGIT CLASSIFIER | Tensorflow, Sklearn, Keras
Fall 2016 | Prof. Rahul Garg
Used Convolutional Neural Networks with dropouts in Tensorflow to classify digits with 99.6% accuracy. Augmented Data for training using keras library. Tried methods like SVM on PCA reduced data to improve accuracy.

SCHOLASTIC ACHIEVEMENTS

2014	Bronze Medal	Asian Physics Olympiad at NUS,Singapore
2014	IITD Merit Award	For being in top 7% of University Students
2014	Rank 2 in India	SCRA examination,UPSC (Government of India)
2013	Top-35 in India	Indian National Chemistry Olympiad(INChO)
2013	Rank 14 in India	KVPY Fellowship, IISc Bangalore

HACKATHONS & COMPETITIONS

2016	Code Fun Do Microsoft	Developed Game in Unity5 and Visual Studio
2016	Aerobot	Came 1st for designing recursions for Robozzle Puzzle
2015	Nutanix Hackathon	Developed application for lawyers-clients community
2015	Import Frosh	Came 2nd in Coding Competition of CS Freshmen
2015	ACM-ICPC	Recieved Honorable Mention at Chennai Site