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: 8.22/10

COURSEWORK

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

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

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.

AI BOT FOR TAK GAME | Alpha-Beta, TD-Learning
Fall 2016 | Prof. Mausam
Designed a competitive bot 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.

NEWS ARTICLES CLASSIFIER | Naive Bayes, Laplace Smoothing
Fall 2015 | Prof. Parag Singla
Implemented both Multinomial and Bernoulli Naive Bayes in python from scratch (Supervised Learning). Laplace Smoothing was done in both cases; Accuracy of 95% achieved on given dataset.

SEARCH ON COMBINATORIAL AUCTION | Local Search
Fall 2016 | Prof. Mausam
Worked on a local search approximation solution to the NP-Hard problem of Combinatorial Auction. Implemented greedy local search with random restarts to reach increasingly profitable solutions.

BASIC SEARCH ENGINE | Svd, Scipy
Fall 2016 | Prof. Rahul Garg
Implemented Latent Semantic Indexing in python using Singular Value Decomposition for matching similar documents, similar words and returning relevant documents for queries.

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