HAROUN HABEEB

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EDUCATION

University of Illinois at Urbana-Champaign	May 2019
M.S. (with Thesis) in Computer Science (Concentration in Artificial Intelligence)	
Indian Institute of Technology, Delhi	2017
B. Tech in Computer Science and Engineering (Concentration in Artificial Intelligence)	GPA: 9.2/10

PUBLICATIONS & PROJECTS

Spatial Deep Neural Network for fMRI Decoding (1st author, under review) — NeuRIPs '19
- Novel architecture with 5% increase in accuracy across multiple fMRI datasets

Physical 3D Adversarial Objects (Joint 1st author, under review) — 3DV 2019
- Demonstrate 3D adversarial objects with 80+% attack rate on Inception-v3 and other models

DOOM Level generation using GraphRNNs (Work in progress) — 2019

Coarse-to-Fine Lifted MAP Infernce for Computer Vision (1st author, link) — IJCAI 2017
- Created notions of symmetry to achieve 60% speedups in MAP inference on MRF

Goal Oriented Conversational Agent with Database in the Loop (link, course project) — Spring 2017
- Built memory networks for goal oriented dialog systems with templatized output space.

Game Playing AI - Quoridor (link, course project) — Spring 2015
- Implemented a Quoridor player in C++ which uses MCTS and RL.

3D Peer to Peer Multiplayer Game (link, course project) — Spring 2015
- Developed 3D P2P racing-FPS game featuring AI and robust network using UDP.

INTERNSHIPS

Software Engineering Intern, Applied Machine Learning, Facebook HQ — Summer 2018
- Developed integrated gradients algorithm (attribution) for **sparse neural networks**
- Optimized to make 5x faster and 20% more consistent than existing methods.
- Used algorithm to do feature selection and gain 0.07% NE (significant) performance increase

Summer Analyst, Deutsche Bank Centre, Mumbai — Summer 2016
- Analysed behavior of correlation between asynchronous equities using SVMs, regression.
- Developed backtesting tools for asynchronous correlation based instruments.

SCHOLASTIC ACHIEVEMENTS

Best Hardcore Experimental Project, IIT Delhi for Coarse-to-Fine Lifted MAP Inference	2017
Received **Summer Undergraduate Research Award** for Point Location in 3D Subdivisions.	2015
Secured **All India Rank 61** among 1,400,000 students in the Joint Entrance Exam, IIT-JEE	2013
Received **Gold Medal** and Certificate of Merit (top 35) at INPhO, National Olympiad	2012
Received **KVPY Fellowship** and **NTSE Scholarship** from Govt. of India	2011,2009

EXTRA CURRICULAR ACTIVITIES

Chief Editor, Board for Student Publications, IIT Delhi (Received Best Chief Editor Award)	2015-16
Vice Chair, ACES-ACM, Official Chapter of ACM at IIT-Delhi	2015-16
Debating (National; Member of **Advisory Panel** for the Debating Society, IIT Delhi)	2013-17

TEACHING EXPERIENCE

Teaching Assistant: Machine Learning Fall 2018, CS105 (Fall 2017, Spring 2018, Spring 2019)