Ankit Goyal

Education

Present Ph.D. Program in Computer Science, Princeton University.

Advisor: Jia Deng

Apr 2018 M.S. in Computer Science and Engineering, University of Michigan.

GPA: 3.97/4.0, Track: Artificial Intelligence

Apr 2016 B.Tech. in Electrical Engineering, Indian Institute of Technology (IIT) Kanpur.

CPI: 9.8/10.0, Minor: Computer Science

Publications

2020 Packlt: A Virtual Environment for Geometric Planning.

A Goyal, J Deng

International Conference in Machine Learning (ICML)

2019 Semantic Relation Detection Between Construction Entities To Support Safe Human-Robot Collaboration in Construction.

D Kim, A Goyal, A Newell, S Lee, J Deng, V Kamat

ASCE International Conference on Computing in Civil Engineering (i3CE)

2018 Think Visually: Question Answering through Virtual Imagery.

A Goyal, J Wang, J Deng

Annual Meeting of the Association of Computational Linguistics (ACL)

2017 ProtoNN: Compressed and Accurate kNN for Resource-scarce Devices.

C Gupta, AS Suggala, **A Goyal**, HV Simhadri, B Paranjape, A Kumar, S Goyal, R Udupa, M Varma, P Jain

International Conference in Machine Learning (ICML)

2016 A Multimodal Mixture-of-Experts Model for Dynamic Emotion Prediction in Movies.

A Goyal, N Kumar, T Guha, SS Narayanan

IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)

2015 Object Matching using Speeded Up Robust Features.

NK Verma, A Goyal, AH Vardhan, RK Sevakula, A Salour

Asia Pacific Symposium on Intelligent and Evolutionary Systems (IES)

2015 Template Matching for Inventory Management using Fuzzy Histogram and Spatial Filters.

NK Verma, **A Goyal**, A Chaman, RK Sevakula and A Salour *IEEE Conference on Industrial Electronics and Applications (ICIEA)*

Work Experience

Summer 2016 Research Intern, Microsoft Research (MSR).

Mentor: Prateek Jain

Developed ML models for IoT devices. Proposed ProtoNN, a model inspired from K-Nearest Neighbour (KNN) model that could fit in devices with only 2kB RAM and still produce accurate predictions.

Summer 2015 Research Intern, University of Southern California (USC).

Mentor: Shrikanth S. Narayanan

Developed models for emotion prediction in movies. Proposed a mixture-of-experts model that dynamically combines audio-visual cues for predicting evoked emotions in movies.

Teaching Experience

Fall 2018 **COS429 Computer Vision**, *Princeton University*.

Head Teaching Assistant

Fall 2017, EECS442 Computer Vision, University of Michigan.

Winter 2018 Graduate Student Instructor

Service

2013-15 Counselling Service, IIT Kanpur.

- Assistant Coordinator: Responsible for managing sensitive situations in the undergraduate community and organizing week-long orientation for over 800 freshmen
- Academic Mentor: Mentored students struggling academically.
- Student Guide: Ensured smooth induction of 6 freshmen into the college environment.

Awards and Achievements

2016 Sridhar Memorial Prize, IIT Kanpur.

Awarded to the best student in the Department of Electrical Engineering.

2015 **Viterbi-India Scholarship**, *USC* and *Indo-US Science* and *Technology Forum* (*IUSSTF*). Selected for the prestigious Viteri-India Program to conduct research in USC.

2013-2015 Academic Excellence Award, IIT Kanpur.

Awarded for distinctive academic performance for 3 consecutive years.