# **Ankit Goyal**

PhD Student, Princeton University

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1 https://imankgoyal.github.io/

# Education

2018-Present Ph.D. Program in Computer Science, Princeton University.

Advisor: Jia Deng

2016-18 M.S. in Computer Science and Engineering, University of Michigan.

GPA: 3.97/4.0, Track: Artificial Intelligence

2012-16 B.Tech. in Electrical Engineering, Indian Institute of Technology (IIT) Kanpur.

CPI: 9.8/10.0, Minor: Computer Science

#### Publications

2020 Rel3D: A Minimally Contrastive Benchmark for Grounding Spatial Relations in 3D

A Goyal, K Yang, D Yang, J Deng

Neural Information Processing Systems (NeuRIPS), Spotlight (Top 4% of submitted papers)

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

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.

#### Service

#### 2020-21 **Reviewer**.

- o 2021: ICLR
- 2020: ECCV, TPAMI

#### 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.
- o Student Guide: Ensured smooth induction of 6 freshmen into the college environment.

# Teaching Experience

# Fall 2019 COS529 Advanced Computer Vision, Princeton University.

Graduate Student Instructor

Fall 2018 COS429 Computer Vision, Princeton University.

Head Teaching Assistant

Fall 2017, **EECS442 Computer Vision**, *University of Michigan*.

Winter 2018 Graduate Student Instructor

### 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.