

ANSHUL MITTAL

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EDUCATION

- Ph.D. in Multi-modal representation using deep learning for extreme multi-label learning** Jan. 2019 - Present
Supervised by **Dr. Manik Varma** and **Dr. Sumeet Agrawal**
Google Ph.D. Fellow - 2019
Indian Institute of Technology Delhi, India CGPA : 10/10
- MS(R) in Deep extreme multi-label learning** Jan. 2017 - Jan. 2019
Indian Institute of Technology Delhi, India CGPA : 9.75/10
- B. Tech. in Civil Engineering with minors in Computer Science** Aug. 2013 - Jul. 2017
Indian Institute of Technology Roorkee, India CGPA : 8.53/10

PUBLICATIONS

- Multimodal extreme classification,
A. Mittal, K. Dahiya, S. Malani, J. Ramaswamy, S. Kuruvilla,
J. Ajmera, K. H. Chang, S. Agarwal, P. Kar and M. Varma CVPR, 2022
- ECLARE: Extreme classification with label graph correlations,
A. Mittal, N. Sachdeva, S. Agrawal, S. Agarwal, P. Kar and M. Varma WWW, 2021
- DECAF: Deep extreme classification with label features,
A. Mittal, K. Dahiya, S. Agrawal, D. Saini, S. Agarwal, P. Kar and M. Varma WSDM, 2021
- DeepXML: A deep extreme multi-Label learning framework applied to short text documents,
K. Dahiya, D. Saini, **A. Mittal**, A. Shaw, K. Dave, A. Soni, H. Jain, S. Agarwal and M. Varma WSDM, 2021
- A modified LSTM model for continuous sign language recognition using leap motion,
A. Mittal, P. Kumar, P.P. Roy, B. Raman and B.B. Chaudhuri IEEE Sensors, 2019
- Rotation and Script Independent Text Detection from Video Frames using Sub Pixel Mapping,
A. Mittal, P.P. Roy and B. Raman JVCIR
- Data extraction from traffic videos using machine learning approach,
A. Mittal, M. Gupta and I. Ghosh SoCProS, 2017

WORK EXPERIENCE

- **Microsoft Research - India**
Multimodal Extreme Classification : **Dr. Manik Varma** May 2022 - Present
Developed graph regularization for training an accurate encoder. The algorithm is currently being deployed in Bing and is serving ads to millions of users. Currently work is in review.
- **Google Research - India**
Machine Learning and Optimization : **Dr. Prateek Jain** May 2022 - Jul 2022
Developed an end-to-end search index for efficient retrieval and ranking of products. The algorithm learns a hierarchical structure over products which in-turn encourages learning of an accurate encoder. Offline results on MS-Marco, FIQA and Sci-fact shows 1-2% improvements in MRR@10 over best baseline.

SKILLS

Programming Languages: PYTHON, C++
Tools and technologies: Beagle Board-xm, Raspberry pi, \LaTeX , SQL
Libraries: OpenCV, Tensor Flow, PyTorch

MISCELLANEOUS

- [Talk]: Google Ph.D. Fellow summit 2021
- [Talk]: Amazon Science research group 2021
- [Award]: Google Ph.D. Fellowship 2019
- [Award]: Project Citizen India (Outstanding Award) 2008