+971-585423704 (UAE) **Prateek Munjal** https://prateekmunjal.github.io/ prateekmunjal31@gmail.com +91-9888611296 (INDIA)

CURRENT **POSITION**

Research Intern, Inception Institute of AI (IIAI), Abu Dhabi, UAE

Project: Robust and Reproducible Active Learning

Primary Advisor: Shadab Khan and Co-advisor: Munawar Hayat

PUBLICATIONS P Munjal, M Hayat and S Khan, Robust and Reproducible Active Learning

A Shahin, P Munjal, L Shao and S Khan, FAIRS Soft Focus Generator and Attention for Robust Object Segmentation from Extreme Points

A Paul, N C Krishnan and P Munjal, Semantically Aligned Bias Reducing Zero Shot Learning, [PDF]

CVPR 2019

P Munjal*, A Paul* and N C Krishnan, Implicit Discriminator in Variational Autoencoder, IJCNN 2020 [PDF]

EDUCATION M.Tech. (Computer Science and Engineering)

> Indian Institute of Technology (IIT) Ropar, India August 2017 to May 2019

CGPA: 8.86 / 10 **Department Rank:** 1

B.E. (Computer Science and Engineering)

PUSSGRC, UIET, India August 2012 to May 2016

CGPA: 7.62 / 10

EXPERIENCE - ML Data Scientist, G42 Healthcare, UAE June 2020 to Present

- Research Intern, Inception Institute of AI, UAE July 2019 to May 2020

- TA at IIT Ropar, Responsible for conducting and evaluating labs and assignments

• Artificial Intelligence: February 2019 to May 2019

• Machine Learning: July 2018 to Dec 2018

• Finite Automata Theory: Jan 2018 to May 2018

• Probability and Computing: August 2017 to Dec 2017

AWARDS Institute Silver Medal, for achieving department rank 1 in Master of Technology at IIT Ropar.

SKILLS C, Python, Pytorch, Tensorflow, Django, Matlab

Major PROJECTS AND SEMINAR

Robust and Reproducible Active Learning (AL): The work presents strong baselines and current issues sustained in AL literature like reproducibility. With extensive experiments on small and large image datasets we are able to show that when we properly regularize the model, the AL methods perform no better than random.

Implicit Discriminator in Variational Autoencoder: We utilize both forward-kl and reverse-kl features by treating the signal from encoder network as a adversarial signal to improve VAE generations. We empirically demonstrated to achieve same (or better) performance compared to VAE-GAN. [Master Project]

DAG Scheduling Using a Lookahead Variant of the HEFT Algorithm: Implemented the research paper as a part of (Advanced Operating System) course project. Crux of the paper was that decision of scheduling a task to processor not only involve its effect rather it also accounts affect on its children while assigning some processor.

Shortest Path Algorithms on distributed graph: Given a large graph(>RAM, stored on secondary disk using various kind of spatial partitioning algorithms), I implemented Dijkstra, A* and hierarchical routing algorithm for computing shortest path on USA Road network dataset.

Placet (Android application): Designed an end to end android application designed for digitizing placement group activities. I contributed for both backend server code (using Django) and front-end on android application.

REFERENCES Narayanan C Krishnan, Assistant Professor,

Indian Institute of Technology (IIT) Ropar, India

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