

Pulkit Gera

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EDUCATION

IIIT HYDERABAD

B.TECH + MS BY RESEARCH IN CS
Expected Aug,2022 | Hyderabad,India
CGPA: 8.75 / 10.0

DAV PUBLIC SCHOOL

Grad. May 2017 | Gurgaon,India
Percentage: 96.4/100

COURSEWORK

RESEARCH

Statistical Methods in AI

(Teaching Asst 2x)

Computer Graphics

Computer Vision

Mobile Robotics

Optimization Methods

Multivariate Analysis

COMPUTER SCIENCE

Data Structures

Operating Systems

Database Systems

Algorithms

Advanced Computer Networks

Unix Tools and Scripting

SKILLS

PROGRAMMING

Languages

Python • C++ • Shell • Javascript

GO • Matlab • SQL • Ruby on Rails

Libraries

Mitsuba 2 • COLMAP • PyTorch •

Tensorflow • OpenGL

Technologies

Github • Docker

ACHIEVEMENTS

AWARDS

• Secured first position in Megathon, 2019 in Big Data Track

• Placed in top 25 contributors out of 700 people in GirlsScript Summer of Code 2018

• Finished 3rd in AICrowd Blitz, out of 350+ teams

POSITIONS

• Head Finance, E-Cell, IIIT Hyderabad (2019)

• Web Admin, E-Cell, IIIT Hyderabad (2018)

EXPERIENCE

SEGMIND SOLUTIONS | DEEP LEARNING INTERN

Aug 2020 - Oct 2020 | (Remote) Bangalore, India

- Ported different object detection and semantic segmentation algorithms into Tensorflow 2.2
- Integrated them into a single library for easy use

AICROWD | TECHNICAL STAFF

October 2019 - June 2020 | (Remote) Geneva, Switzerland

- Designed over 200 questions to be used in various challenges.
- Made benchmarks and tested different research based challenges.

DREAMVU INC | COMPUTER VISION INTERN

June 2019 - July 2019 | Hyderabad, India

- Designed tools to benchmark images captured with various SOTA algorithms.
- Assisted in capturing data and improving image quality captured by the camera.

RESEARCH

CENTER FOR VISUAL INFORMATION TECHNOLOGY |

RESEARCHER

May 2018 - Present | Hyderabad, India

Worked with **Aakash KT** and **Prof P.J.Narayanan** on Neural Rendering based methods to do material editing with relighting for free viewpoint synthesis.

INFORMATION RETRIEVAL AND EXTRACTION LAB |

INDEPENDENT STUDY

July 2020 - Present | Hyderabad, India

Worked with **Prof Vasudeva Verma** and **Prof Balaji Vasan Srinivasan** on visio-linguistic transformer-based methods for multi modal news summarising.

UNIVERSITY DE LAVAL | RESEARCH INTERN

May 2020 - August 2020 | Hyderabad, India

Worked with **Prof Jean Francois Lalonde** on implicit representation of indoor scenes and to perform novel view synthesis.

PROJECTS

MULTIMODAL NEWS SUMMARIZATION

Multimodal News Summarization using an encoder decoder architecture where the text and image were encoded using OSCAR.

DEFERRED NEURAL RENDERING

U-Net based learnable differentiable renderer with neural textures capable of performing freepoint view synthesis.

MIRROR GAN

Text to Image GAN based model utilizing attention to generate regions and using a mirror loss to compare with caption generated.

IMAGE TRANSLATION

Converted Images to Paintings and vice versa using CycleGAN and implemented in PyTorch.

INSTANCE SALIENCY DETECTION (CVPR 2017)

Attention based multiscale instance salient detection using multiscale combinatorial grouping.