Apoorva Srivastava

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EDUCATION

MS by Research
IIIT Hyderabad

07/2019 - Present,   *9.17 CGPA*

Labs and Advisor
- Associated with CVIT and BaSIL Lab
- Research Scholar under Dr. Anoop Namboodiri http://tiny.cc/m4khuz

B.Tech. in ECE
Banasthali University

07/2012 - 05/2016,   *83.39% (Gold Medalist)*

Courses
- Electronics and Communication Engineering

WORK EXPERIENCE

Configuration Engineer
Ericsson Global Services Private Limited

08/2016 - 09/2018,   *Noida*

Achievements/Tasks
- Configured and monitored the telecom nodes of 2G,3G, and 4G technology of various telecom operators.
- Cleared ETCP-IP certification.
- Cleared ETCP-MPLS certification.
- Got Recognized as the Employee Of The Month of January.

ACHIEVEMENTS AND CERTIFICATIONS

NPTEL Certificate in Deep Learning for Computer Vision
Topper of the course with Gold+ Elite Certificate for 99% Marks
https://drive.google.com/file/d/10oz51e_cIQoUSVGcExqyU7D1MO1pFSDh/view?usp=sharing

Gold Medalist B.Tech. ECE
University topper for the ECE batch 2012-2016
https://drive.google.com/file/d/15p1s8P3UD9rvcJHlXEKXwEL0meA76EEg/view?usp=sharing

3 times GATE Qualified
GATE Qualified for 2016,2018,2019 with percentile> 96%

Certificate in Image and Video Processing
https://www.coursera.org/account/accomplishments/certificate/5K4FZRZ48WWE

Participated in 5th Summer School on Artificial Intelligence by IIITH (08/2021 - 09/2021)
Got a holistic view of the recent trends in AI and Computer Vision
https://drive.google.com/file/d/1bsrlRq7oviwrfNM-ucFdpBGA7rturUXa/view?usp=sharing

TECHNICAL SKILLS

`Computer Vision` `3D Reconstruction` `Machine Learning` `Computational Photography` `Deep Learning` `Python` `Blender` `MATLAB` `Octave` `Optimization` `Digital Image Processing`

PROJECTS & IMPLEMENTATIONS

3D fingerprint using Photometric Stereo
- **Modeled a finger on the blender and simulated the lighting conditions** to perform 3D reconstruction using Photometric stereo on MATLAB.
- **Designed Camera and Lighting Setup to obtain 3D results on Real finger** using Raspberry pi, Python, and MATLAB algorithms.
  https://github.com/ApoorvaSrivastav/3D-Fingerprint

Detection and Segmentation of Moving Objects in Video Sequence using Optical Flow
- Implemented **Lucas Kanade Optical Flow Algorithm** to detect the movement in a self-recorded video
  https://github.com/ApoorvaSrivastav/Optical-Flow

3D Reconstruction of Objects using Structured Lighting
- **Deployed DIY setup for Structured lighting** and obtained 3D results on Real- Life Objects.
- **Performed Projector and Camera Calibration** and acquired images under Structured Lighting.
  https://github.com/ApoorvaSrivastav/Structured-Lighting

3D point cloud object reconstruction from monocular RGB image
- Successfully implemented CVPR 2016 paper on monocular 3D reconstruction in a group of 3.
- Project involved **training CNN to reconstruct 3D point cloud of an object using single image.**
  https://github.com/ApoorvaSrivastav/3D-Point-Cloud-Object-Reconstruction-from-Monoclar-RGB-Image

Geometric Computer Vision
- Implemented Epipolar Geometry,Triangulation,Camera-Calibration Pose Estimation,3D Stereo Reconstruction,Localization using Kalman Filter as course assignments
  https://github.com/ApoorvaSrivastav/Geometrical-Computer-Vision

Separation of Direct and Global Components of a Scene using U-Net
- Successfully implemented article in ACM Graphics on Fast separation of direct and global components of a scene using high-frequency illumination.
- Trained a U-Net network for replacing the physical setup andperforming the Global Direct Separation using single image.

VOLUNTEER EXPERIENCE

Covid Volunteer
Covid War Room

Hyderabad
Started by IIIT Hyderabad Alumni Group
- Covid War Room in news: https://blogs.iiit.ac.in/cwr/
- Covid War Room Architecture: shorturl.at/tuAKO