Manan Oza

Linkedin : https://linkedin.com/in/manan-oza Github : https://github.com/ozamanan

Education

- SUNY Buffalo
- Masters of Science in Computer Science and Engineering
- D. J. Sanghvi College of Engineering B. E. in Computer Engineering

Publications

- Auto-Encoding Progressive Generative Adversatial Networks For 3D Multi Object Scenes: https://arxiv.org/abs/1903.03477 (Vedant Singh, Manan Oza, Himanshu Vaghela, Prof. Pratik Kanani) We use progressive GANs with a novel objective function that aids in easy convergence of the model and produces realistic high resolution results.
- Progressive Generative Adversarial Binary Networks for Music Generation: https://arxiv.org/abs/1903.04722 (Manan Oza, Himanshu Vaghela, Prof. Kriti Srivastava)

A novel approach to progressively train a GAN with deterministic binary neurons to generate polyphonic music.

• Semi-Supervised Image-to-Image Translation: https://arxiv.org/abs/1901.08212 (Manan Oza, Himanshu Vaghela, Prof. Sudhir Bagul)

An image-to-image translation technique based on the semisupervised learning paradigm with a modified objective function including a photorealism factor that helps generate better results.

• MREAK: Morphological Retina Keypoint Descriptor: https://arxiv.org/abs/1901.08213 (Himanshu Vaghela, Manan Oza, Prof. Sudhir Bagul) A keypoint descriptor named Morphological Retina Keypoint Descriptor inspired by the function of human pupil thus identifying a greater number of keypoints in the target image.

EXPERIENCE

• Epocare Pvt. Ltd., IIT Bombay

Reserach Intern Worked with laser speckle contrast images to find different parameters of the blood within the organ. (Opencv C++ and Qt) Won the second prize at NASSCOM 2018 Social Innovation Challenge in healthcare.(click here)

Projects

- Manifold based meta reinforcement learning (ongoing).
- Identification of deep fakes and morphed photos. (ongoing)
- Implemented various reinforcement learning algorithms like Proximal Policy Optimization, Advantage Actor Critic, etc on OpenAI Gym and Atari environments.
- Pintos OS : implemented priority scheduler, advanced scheduler, system calls and argument passing for the Pintos toy operating system.
- Neural Style Transfer A set of implementation of style transfer algorithms by Luan et al., Gatys et al., etc

Awards

- Won the Facebook-sponsored prize at UB-Hacks hackathon. (November, 2019)
- Fully funded scholarship by D.J. Sanghvi College of Engineering for B.E. in computer engineering from 2015 2019. (Only student to be awarded full funding out of 600 students.)

PROGRAMMING SKILLS

• Languages: Python, C++, C, Java Technologies: Tensorflow, PyTorch, Keras, Lunix, IAT_EX , Qt

Buffalo, USA Aug. 2019 – Present

Mumbai, India

Mumbai, India Aug. 2015 – July. 2019