

## Indian Institute of Science Education and Research Bhopal

## Computer Vision (DSE/EECS-312) Bonus Assignment-1

Deadline: 14-10-2024, 11:59 PM Max mark: 10

Please follow the instructions carefully.

- 1. Plagiarism and copying from anywhere (similar submission) can debar you from this course and invite the academic dishonesty policy.
- 2. The length of the video should be between 3-5 minutes.
- 3. The video should not be abusive and/or harmful in any sense to anyone.
- 4. The purpose is to learn the recent advancements of AI in the Computer vision world only. Therefore, no personal interest will be entertained.

## Submission:

- 1. Video
- 2. A 1-2 page report only in the given overleaf template explaining the topic of your video, the crux, an explanation of the tool used in both questions and its link.
- Using recent advancements in generative AI and computer vision technologies, create
  a simulated debate video featuring two prominent historical or contemporary figures.
  The debate should center around a critical and timely issue, such as climate change,
  technological ethics, international relations, or social justice. Additionally, consider
  the ethical implications and technical challenges of creating realistic AI-generated
  representations of real individuals.

Here is one example: https://www.linkedin.com/feed/update/urn:li:activity: 7118570023987683328?updateEntityUrn=urn%3Ali%3Afs\_feedUpdate%3A%28V2%2Curn%3Ali%3Aactivity%3A7118570023987683328%29

2. Explore the various open-source toolboxes and applications used in the field of computer vision and come up with some interesting applications or toolboxes related to the Computer Vision field (Inpainting, Pose Estimation, DeepFakes(Image, Audio or Video), Adversarial Example Generation, Style Transfer). Select any toolboxes or applications and use them to test their effectiveness in solving the specific problem you are addressing, and discuss their core functionalities, advantages, and real-world applications.

## Best wishes