A. Artifact Appendix[1]

In the *LiVSec* project, we develop 1) a 3D face authentication system, 2) a generative model which generates perturbations that can prevent the face models from being exploited to bypass DL-based face authentications while maintaining the required quality and functionality of the 3D video surveillance, and 3) an end-to-end security-preserving live 3D video surveillance system. The detail of this project is described in our recently-accepted MMSys'23 paper:

Zhongze Tang, Huy Phan, Xianglong Feng, Bo Yuan, Yao Liu, and Sheng Wei. 2023. Security-Preserving Live 3D Video Surveillance. In Proceedings of the 14th ACM Multimedia Systems Conference (MMSys '23), June 7–10, 2023, Vancouver, BC, Canada.

The GitHub repository of this project is at

`https://github.com/hwsel/LiVSec`

which contains both the code and the instructions for the following three components:

- Reproduce the experimental results reported in the paper.
- Train your own face authentication model and protected face generation model.
- Set up the end-to-end security-preserving live 3D video surveillance system.

We recommend that interested readers follow the code and instructions in the GitHub repository to reproduce our system and results.

[1] This appendix is only for the reproducibility review at MMSys'23 and not intended for publication with the camera-ready paper.