Learning Lipreading for Biometrics
Master’s Thesis

Description:
One important element for identity management is to use biometric technologies. Although fingerprint and face recognition are well-known biometric technologies, the idea of using lipreading as a biometric technique is rather new and extraordinary. A scientific breakthrough in 2016 in lipreading on the GRID corpus dataset promises that deep learning of lipreading will allow lipreading to be used in practical situations and might fundamentally innovate biometrics at a distance. Some modules of the learning process (see above) are also scientifically interesting for learning tracking such as the STCNN module.

Objective:
- Review biometric literature in terms of lipreading
- Implement training and test algorithms
- Train, validate and test on the GRID corpus dataset

Qualifications:
- Experience in Matlab, C++, Python, open to learn Torch
- Interest in Machine Learning
- Interest in GPU programming

Literature:

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