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# Impact of Deep Learning on Facial Data Security

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## Résumé

In face recognition, several techniques have been developed over the years to protect facial templates as well as facial sample data. With the rise of deep learning techniques, face recognition has seen a revolution in terms of achievable recognition accuracy. These developments also had impact on the security techniques applied to facial data. We will demonstrate that early template protection schemes do not provide security any longer in case deep learning based recognition is used. Further, the security of existing selective encryption schemes developed for facial data has to be re-considered in case deep learning based recognition is used. Finally, we will show that learning-based inpainting schemes can be used to successfully attack selectively encrypted facial data.

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