

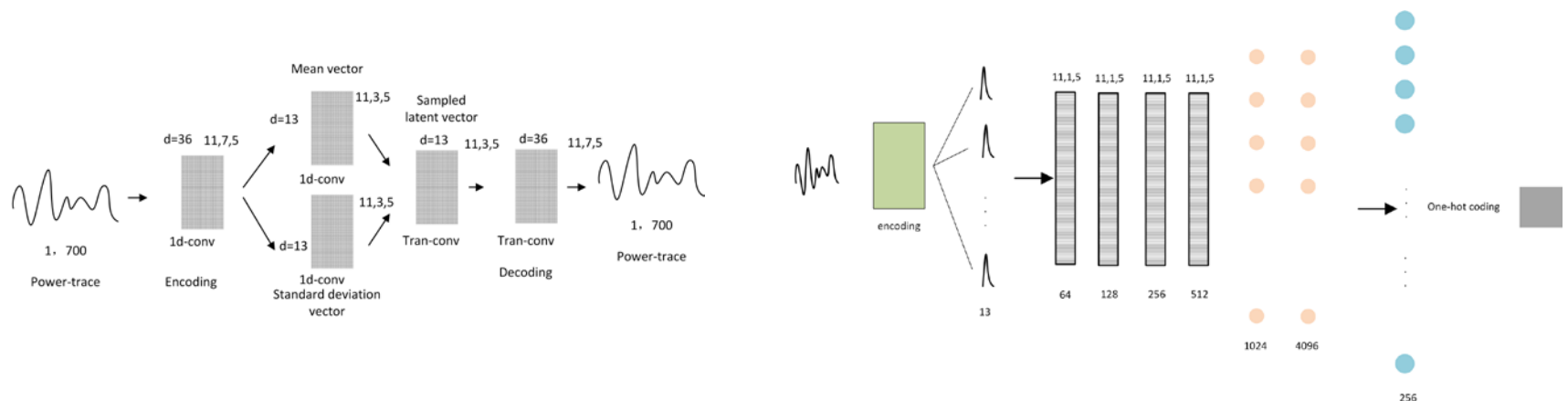
Side-Channel Analysis Attacks based on Deep Learning Network

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Frontiers of Computer Science, DOI: [10.1007/s11704-020-0209-4](https://doi.org/10.1007/s11704-020-0209-4)

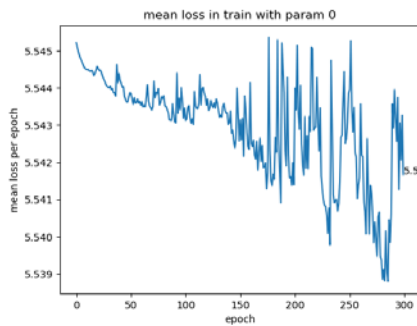
Problems & Ideas

- Problems of Model design in side channel analysis based on deep learning network
 - There are little interest in model design.
 - Traditional models such as MLP and CNN have not enough targeted in SCA.
- Ideas: Pre-trained DL Classification model
 - Three sub-networks based on the CNN and the Autoencoder
 - Supervised and unsupervised training process

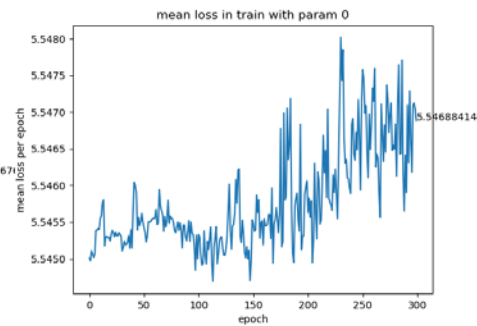


Main Contributions

- The result of training



a. Training-set loss curve



b. Testing-set loss curve

- The result of evaluating

