Software Architecture

Digital Audio Signal From Electronic Stethoscope → Audio to Spectrogram Conversion → Data Pre-Processing Unit → Sequential Deep Learning Model → Normal / Abnormal
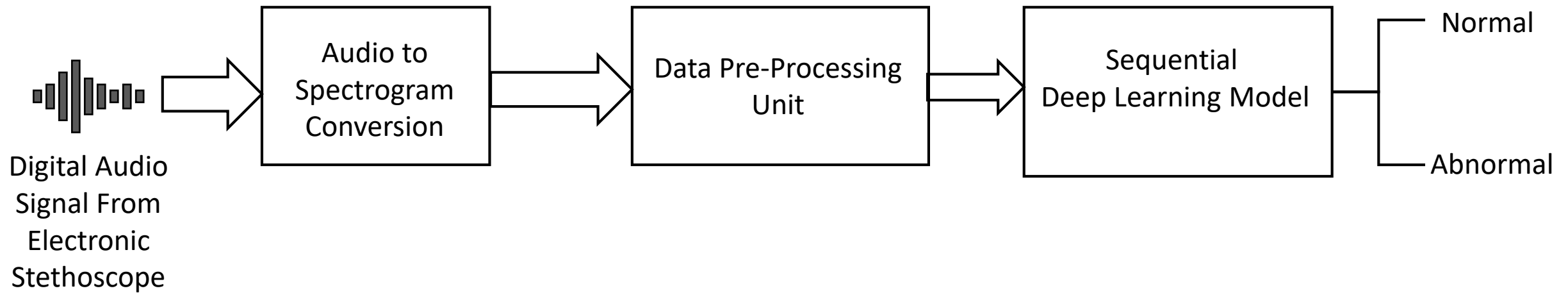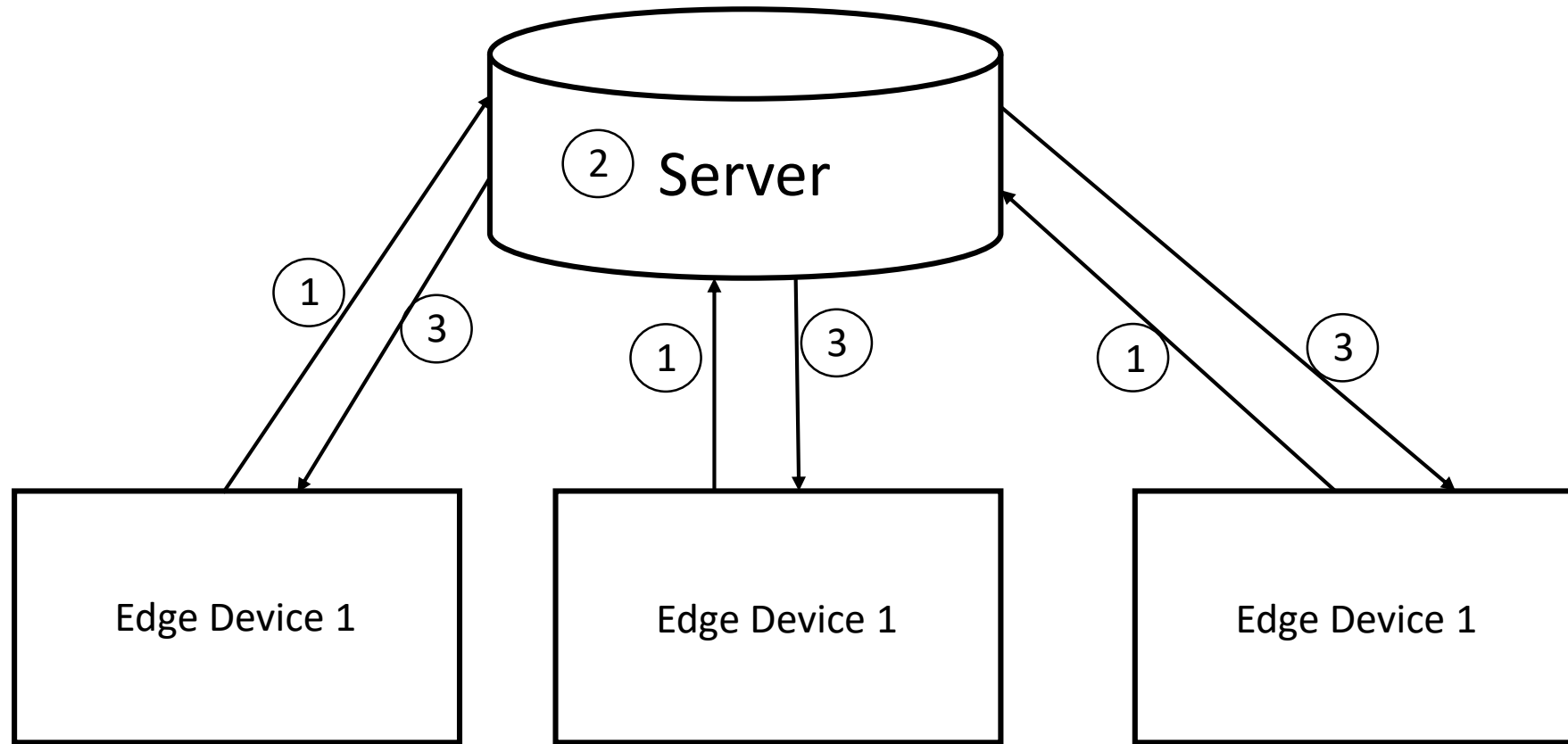
1. Edge Device Architecture

1   Sending Encrypted Gradients

2   Secure Aggregation

3   Sending back model updates

2. Federated Learning Architecture