TinyML Application: CNN Sensor Analytics for Structural Health Monitoring

S1

S2

Experimental setup:

Sensor and noise positions

Training dataset

Testing dataset
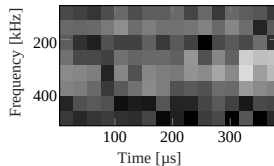
Model architecture
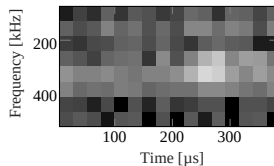
Sampling frequency = 10 MHz
FFT length = 32 samples
Windowing = Blackman
Overlap = 8 samples
Frequency range = 100kHz - 500kHz