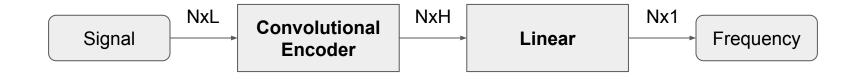
# **FSR Fusion Model**

Frequency Estimation with Attention

## **Frequency Estimation Model**

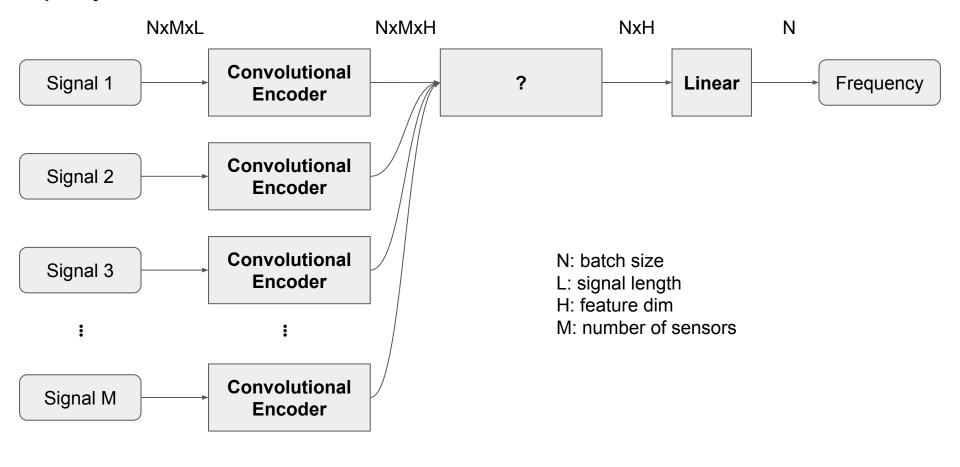


N: batch size

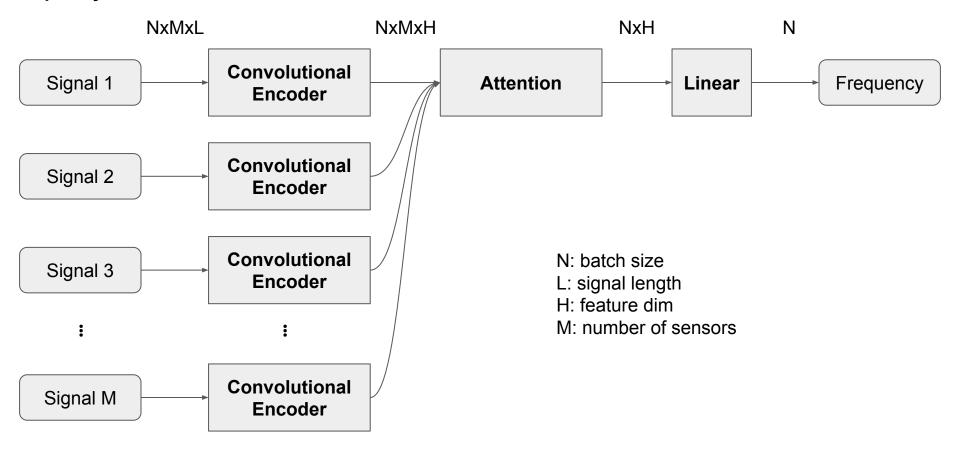
L: signal length

H: feature dim

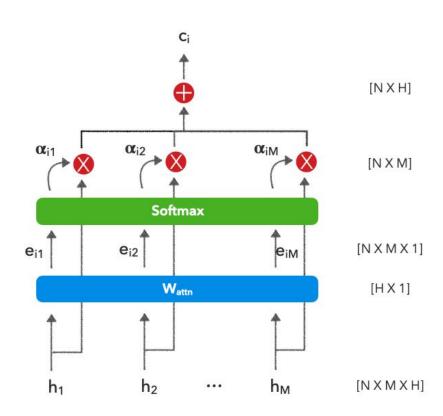
#### **Frequency Estimation Model**



#### **Frequency Estimation Model**



### **Attention**



N: batch size

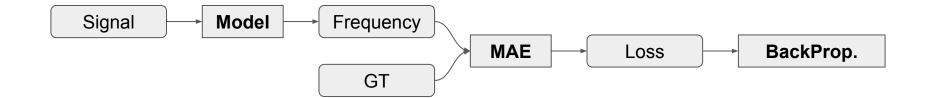
H: feature dim

M: number of sensors

h: encoder outputs

a: attention values

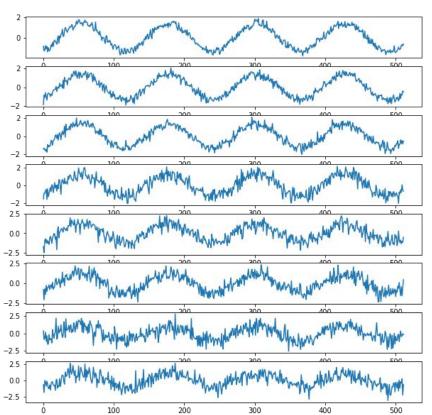
#### **Training Process**



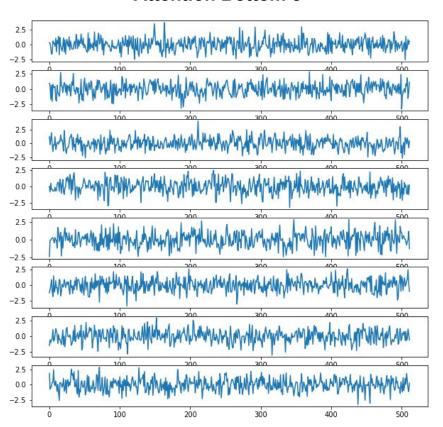
$$MAE = rac{1}{N} \sum_{i=1}^N |f_i' - f_i|$$

#### **Experiment Result – Virtual Data**

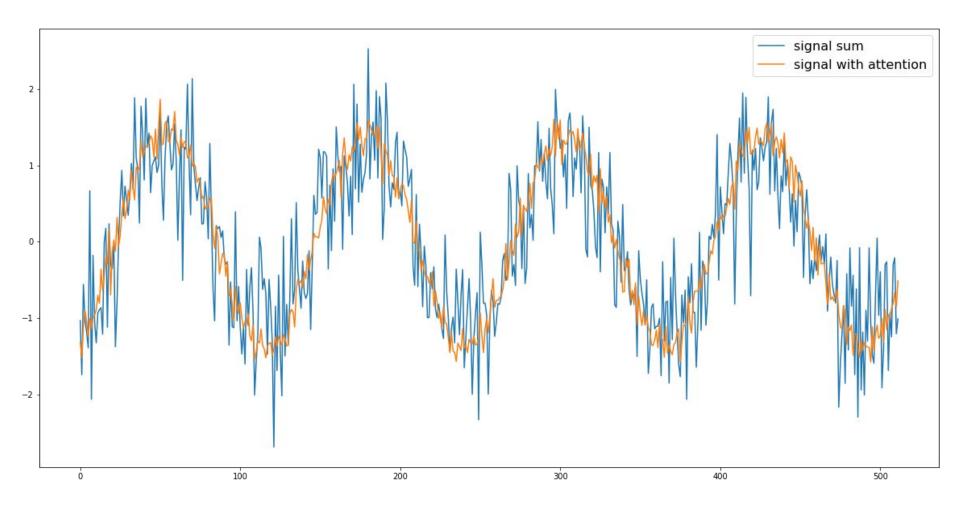




#### **Attention Bottom 8**

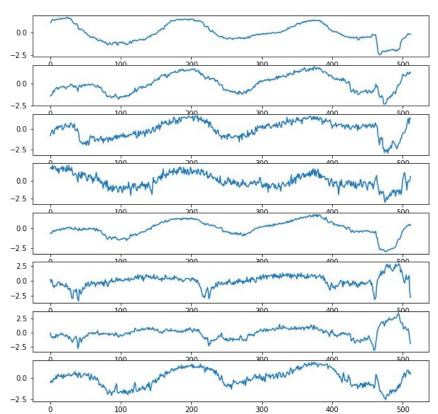


# **Experiment Result – Virtual Data**

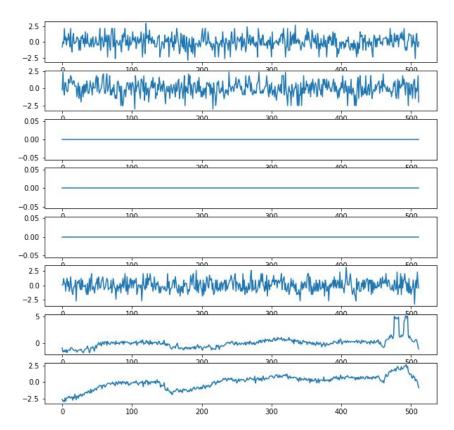


#### **Experiment Result – Real Data**





#### **Attention Bottom 8**



# Experiment Result – Real Data

