Identifying Hand Hygiene with Deep Learning

JAMES EDWARDS

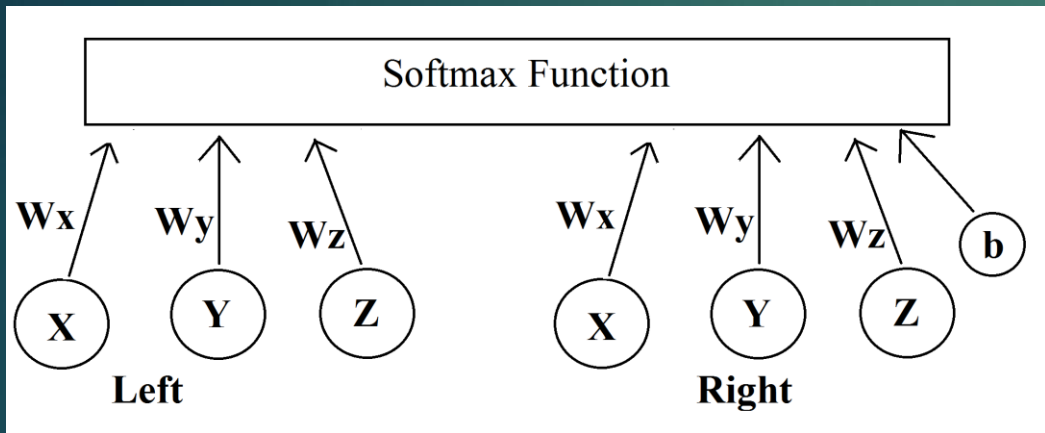ADVISOR: DR. GALLUZZI

Motivation

- Healthcare

- Deep Learning

Data

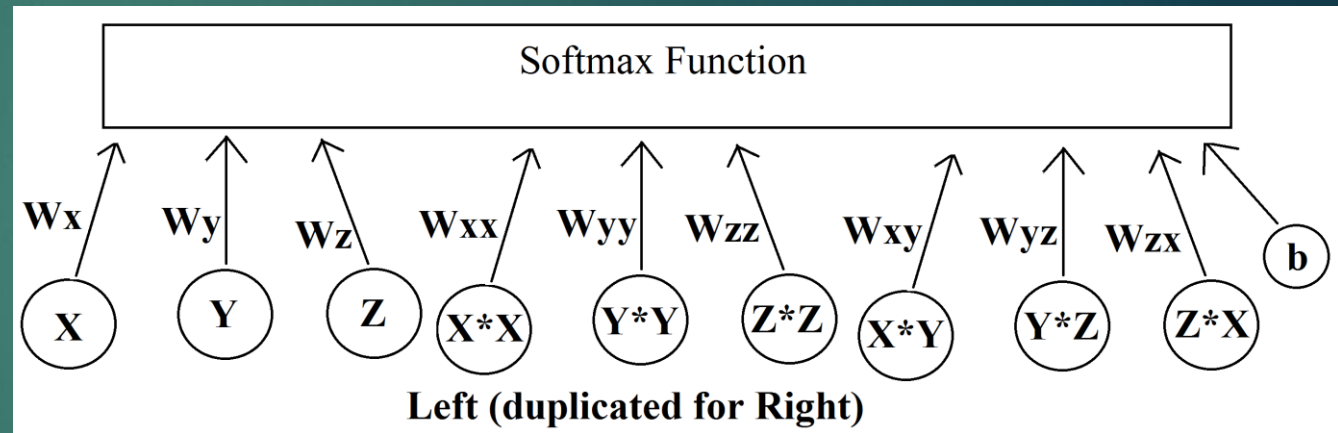- X,Y,Z accelerometer data

- 100 Hz

- Supersampled

$$\begin{bmatrix} x_1 & x_2 & \dots & x_n \\ x_{n+1} & x_{n+2} & \dots & x_{2*n} \\ \vdots & & \ddots & \end{bmatrix}$$
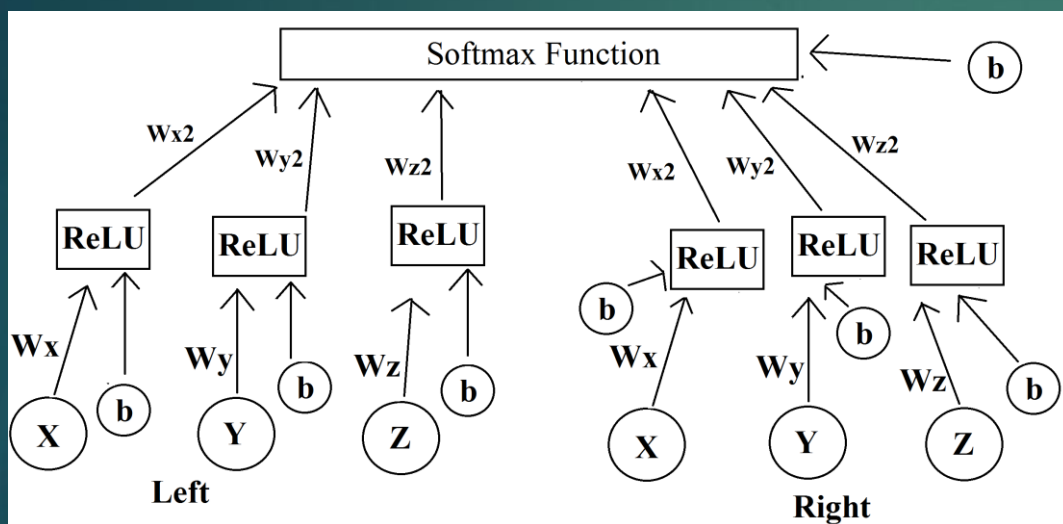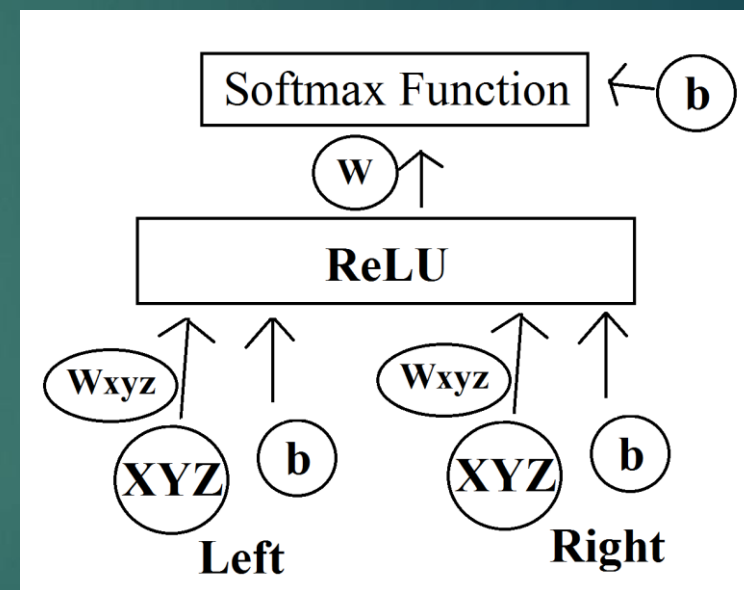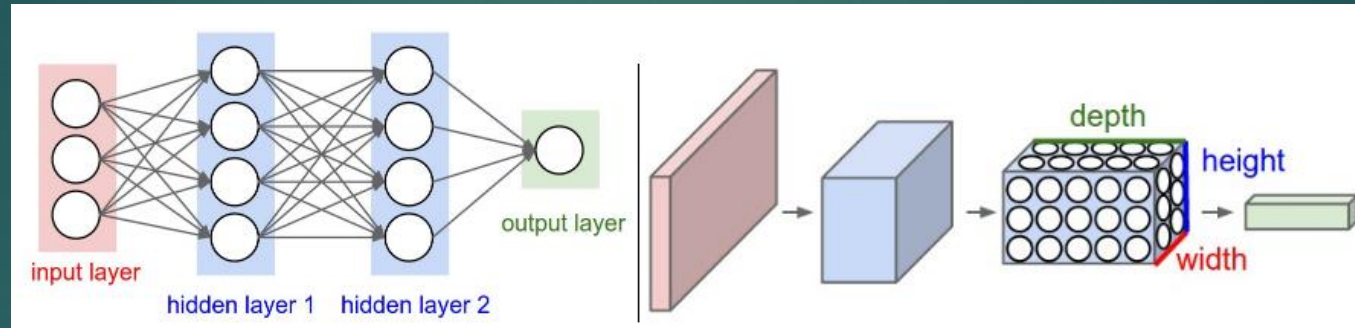
Models

Original

Complex

Models

Models

Deep

http://cs231n.github.io/convolutional-networks/
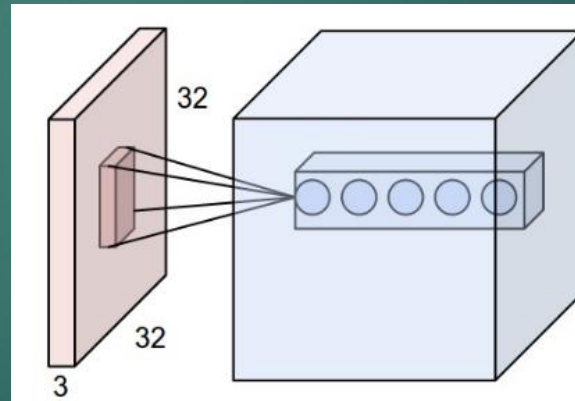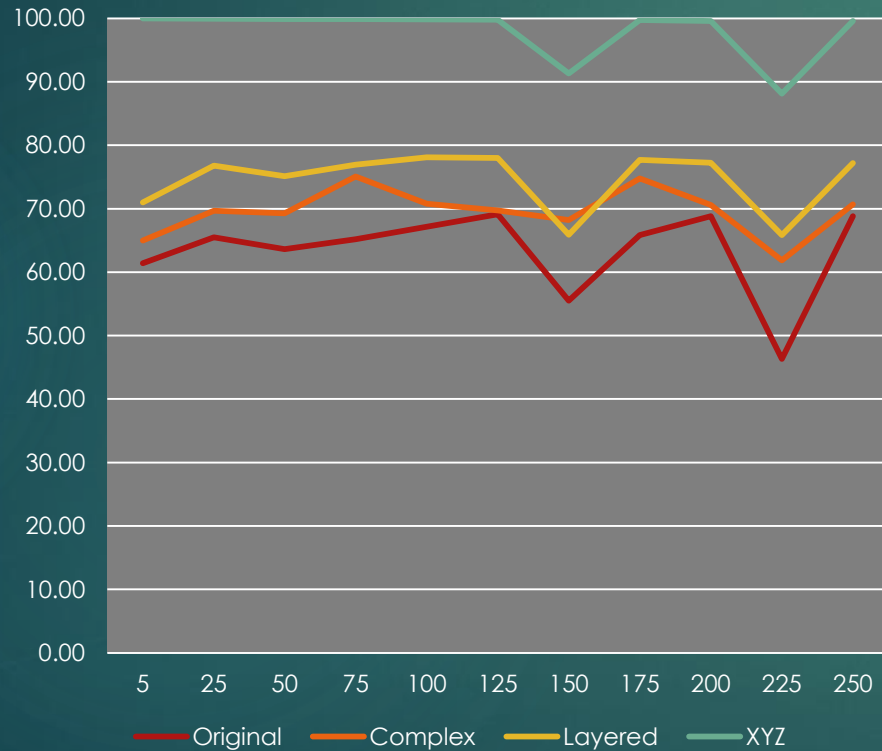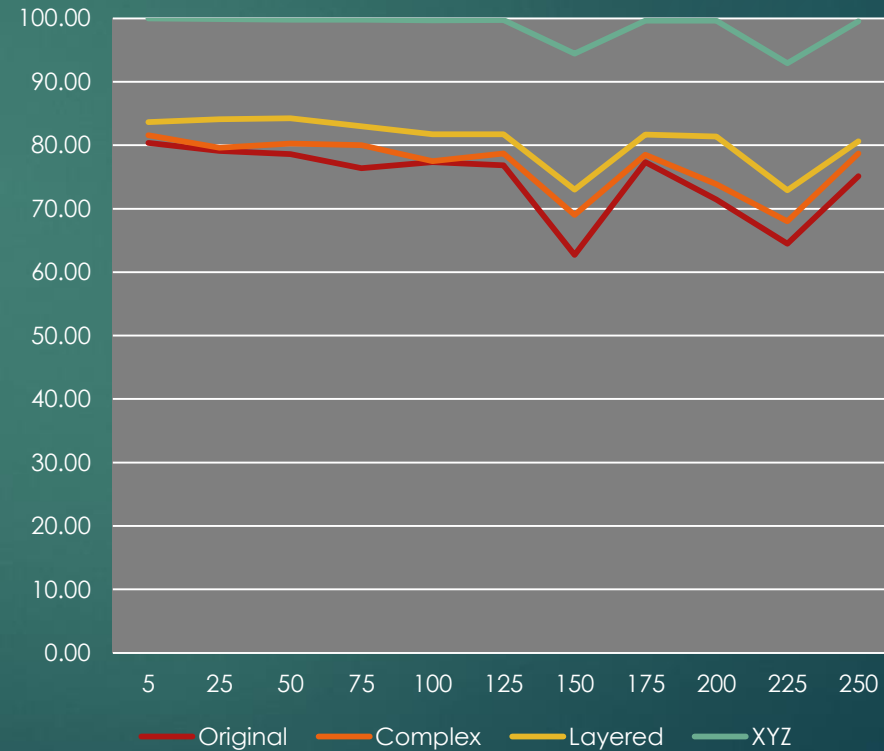
Results

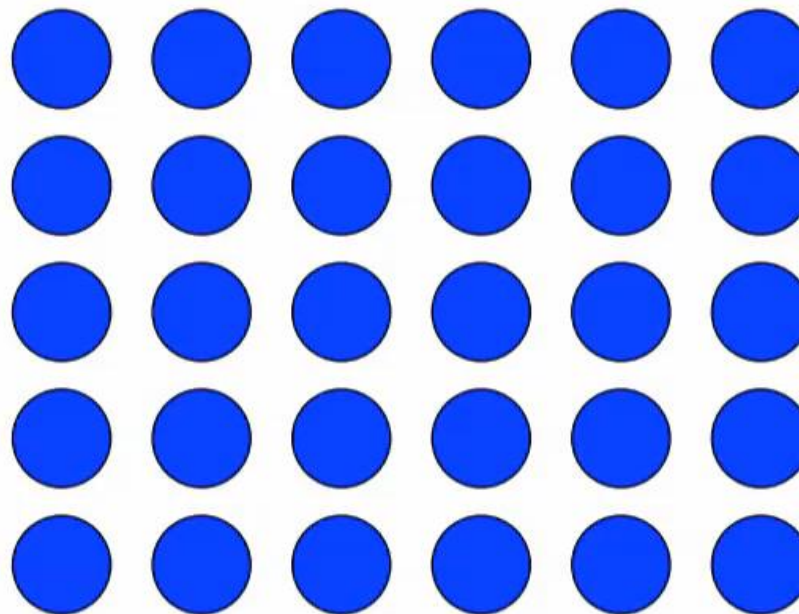# Results

Deep
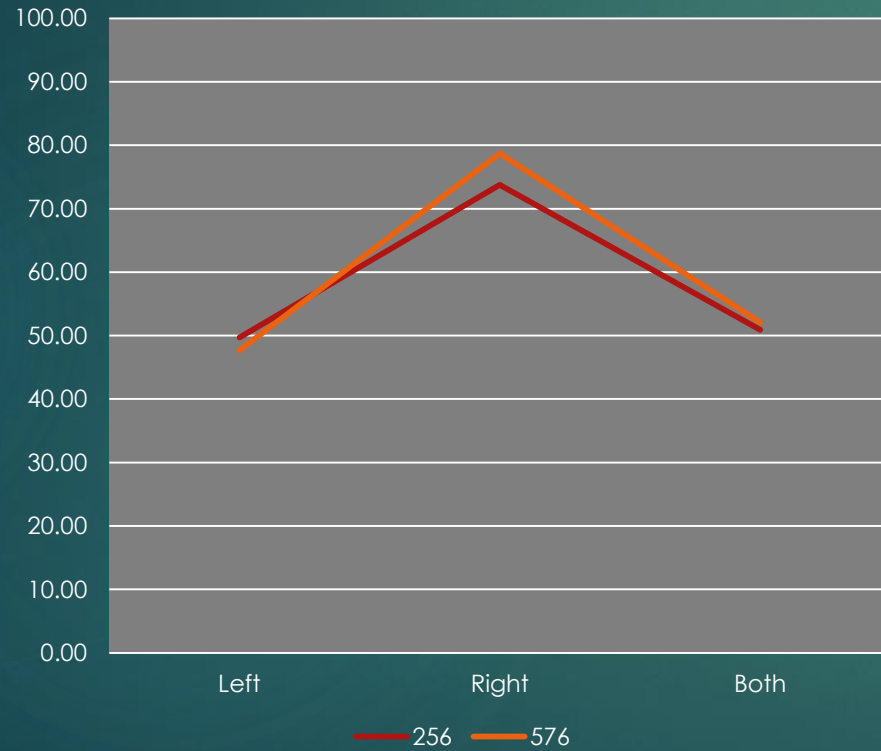
Next Steps

- Improve Models, Training
- Unlabeled Data

- Literature Review

Questions?

Handedness