

JaMor Hairston

BMI 500

20 Nov 2023

Edge Computing and Human Activity Analysis

[https://github.com/jmhairston/Hairston\\_BMI500\\_HW13](https://github.com/jmhairston/Hairston_BMI500_HW13)

Part 1 Mediapipe –



Part 2 Human Activity Recognition –

Kernel Size: 15, Window Size: 1, Classification: Multilayer Perceptron

Best Parameters: {'hidden\_layer\_sizes': (100, 50),

'alpha': 0.001,

'max\_iter': 200,

'solver': 'adam',

'learning\_rate': 'adaptive'}

Validation Set Accuracy with Best Parameters: 0.642

Test Set Accuracy with Best Parameters: 0.520

**Kernel Size: 10, Window Size: 1.5, Classification: Multilayer Perceptron**

Best Parameters: {'hidden\_layer\_sizes': (40, 20),  
'alpha': 0.01,  
'max\_iter': 100,  
'solver': 'adam',  
'learning\_rate': 'adaptive'}

Validation Set Accuracy with Best Parameters: 0.642

Test Set Accuracy with Best Parameters: 0.515