

Human Activity Recognition

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The Data

WISDM Lab at Fordham University

2 Devices, 2 Sensors

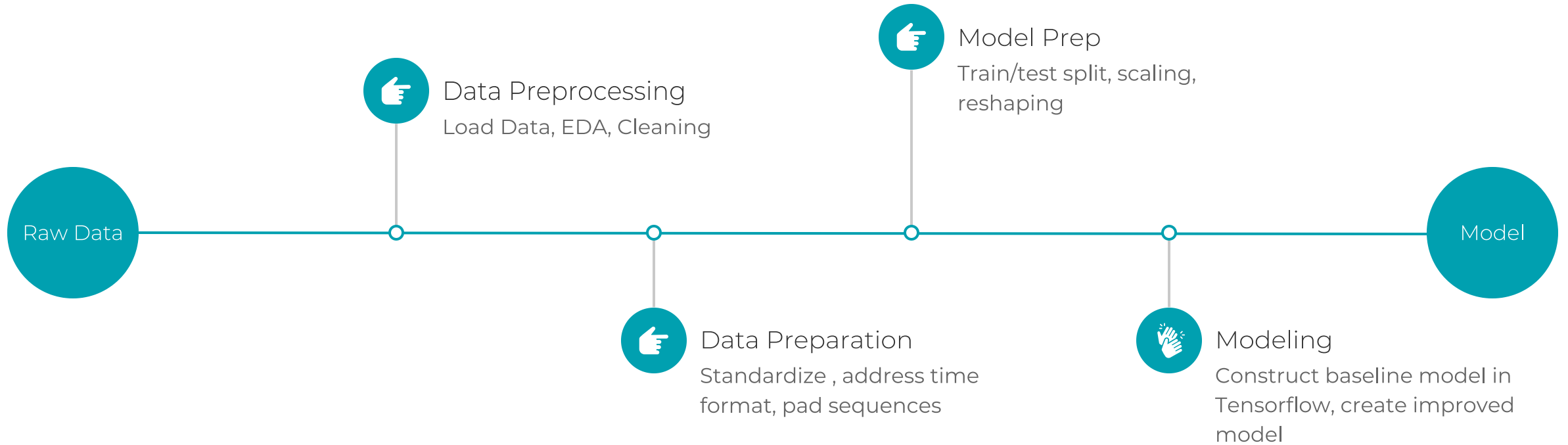
Collected from both gyroscopes and accelerometers in both smartwatches and smartphones

18 Different Activities, 51 Participants

Collected across all 4 sensors in sync

3 Minutes per Activity

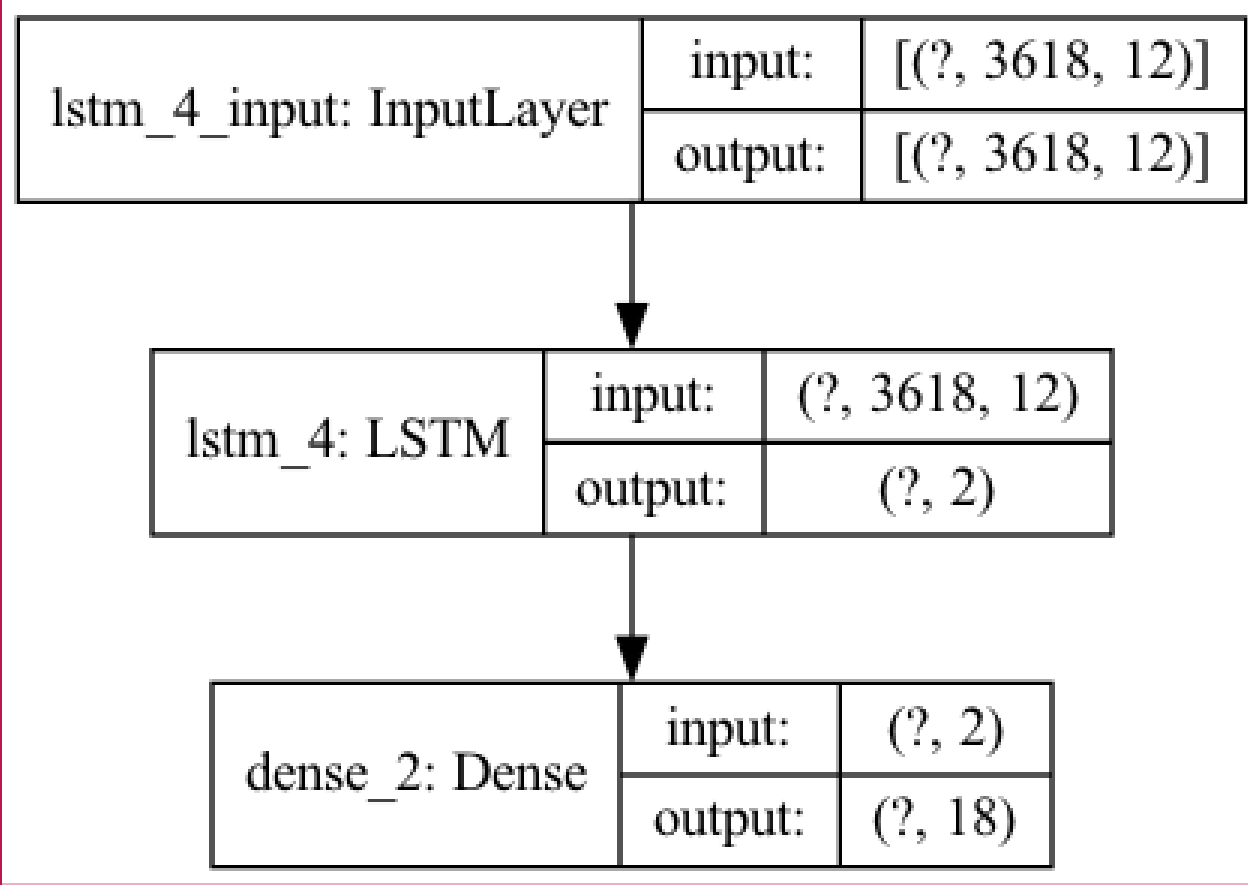
54 minutes of data for all participants



Project Workflow

Classification Model 1

Training Accuracy: 0.2088
Test Accuracy: 0.0617

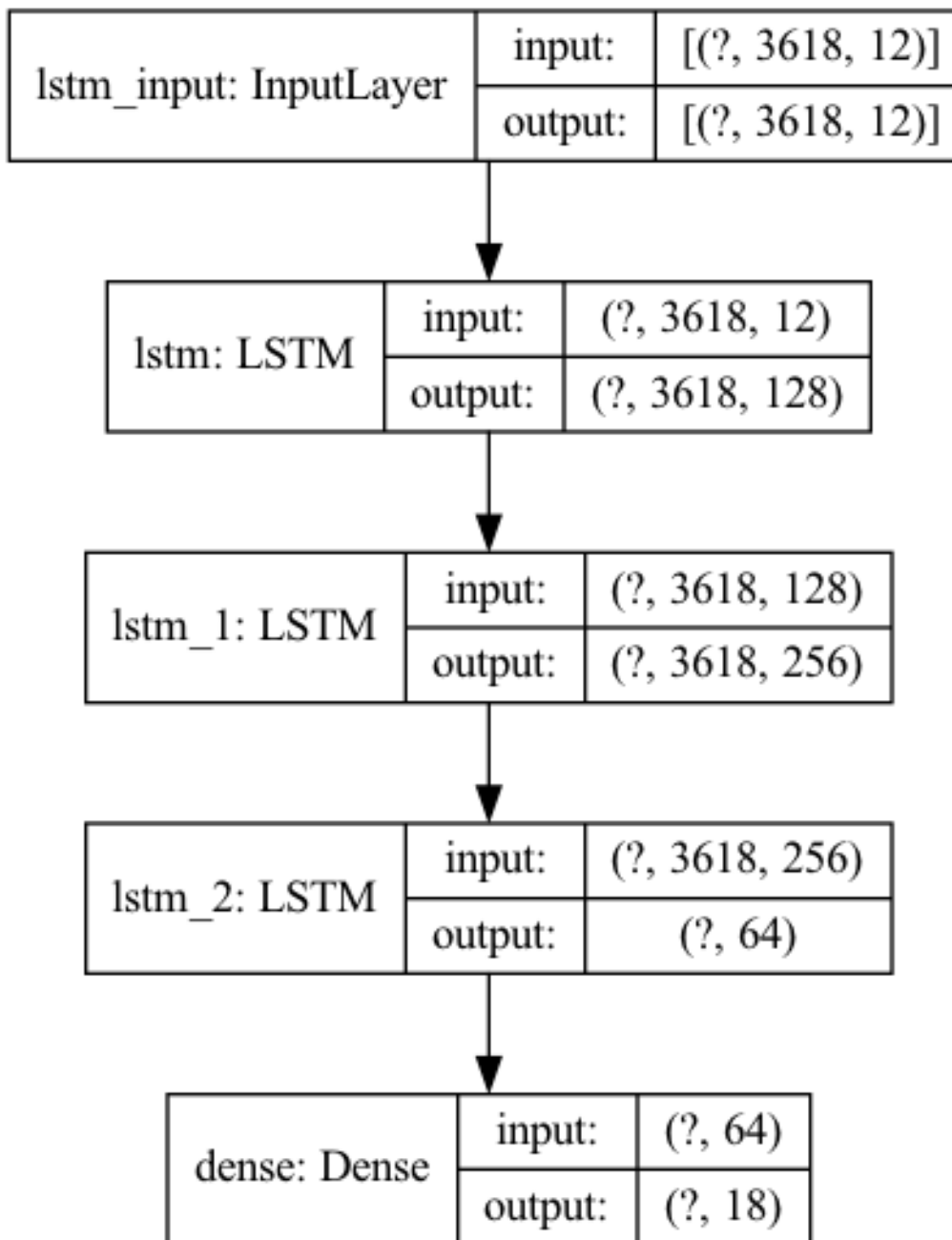




Classification Model 2

Training Accuracy: 0.0544

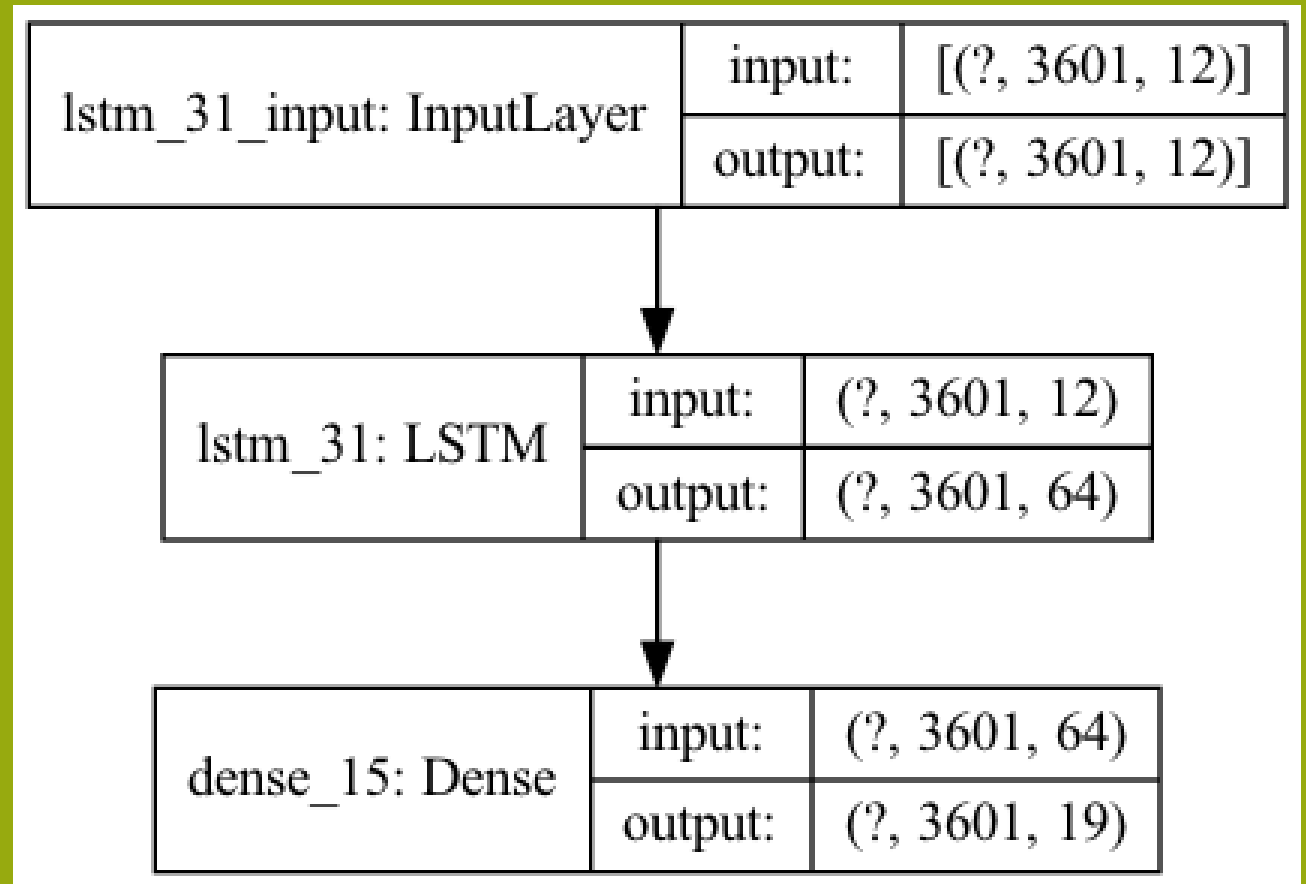
Test Accuracy: 0.0396

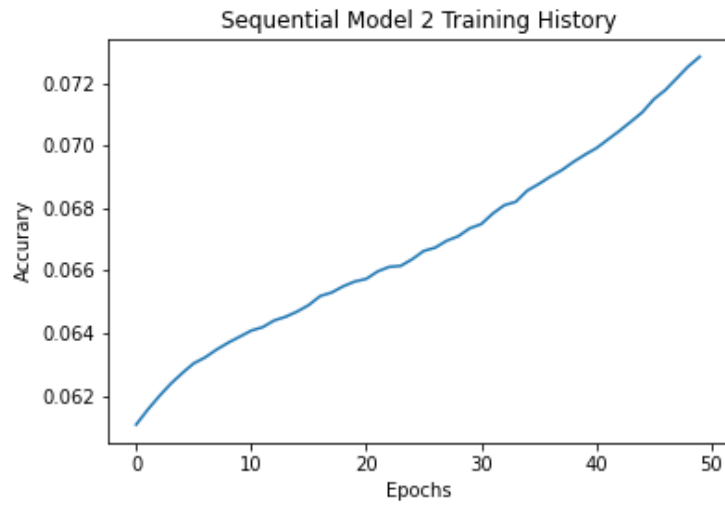


State Prediction Model 1

Training Accuracy: 0.0846

Test Accuracy: 0.0531

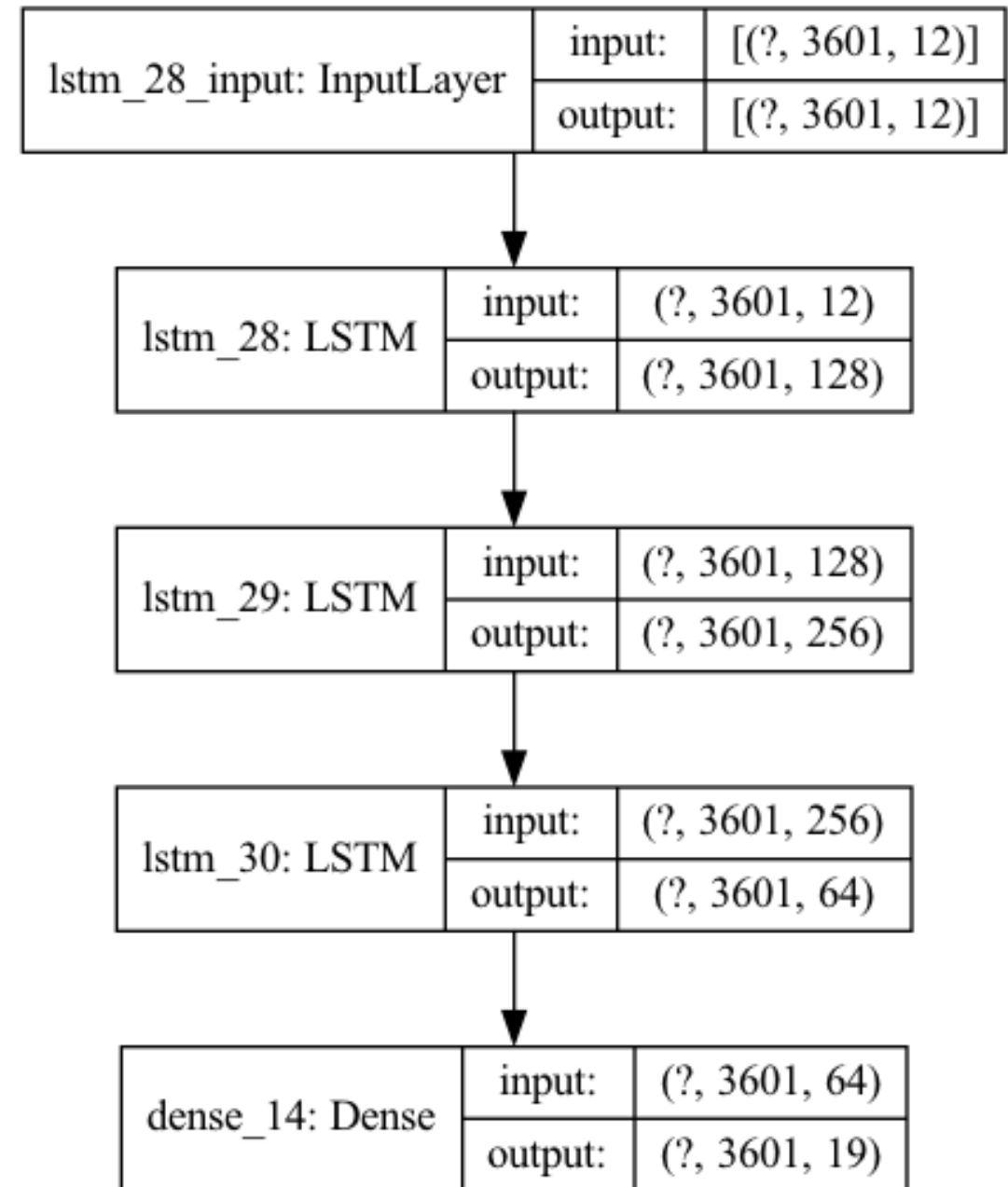




State Prediction Model 2

Training Accuracy: 0.0728

Test Accuracy: 0.0410



Next Steps

- 1 Averaging vs Resampling
- 2 Different Accelerometer Data
- 3 Less Complex LSTM Architecture



Thank You!



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