MICHIGAN STATE UNIVERSITY

Beta Presentation
Recipe Progression Tracking

The Capstone Experience

Team Whirlpool

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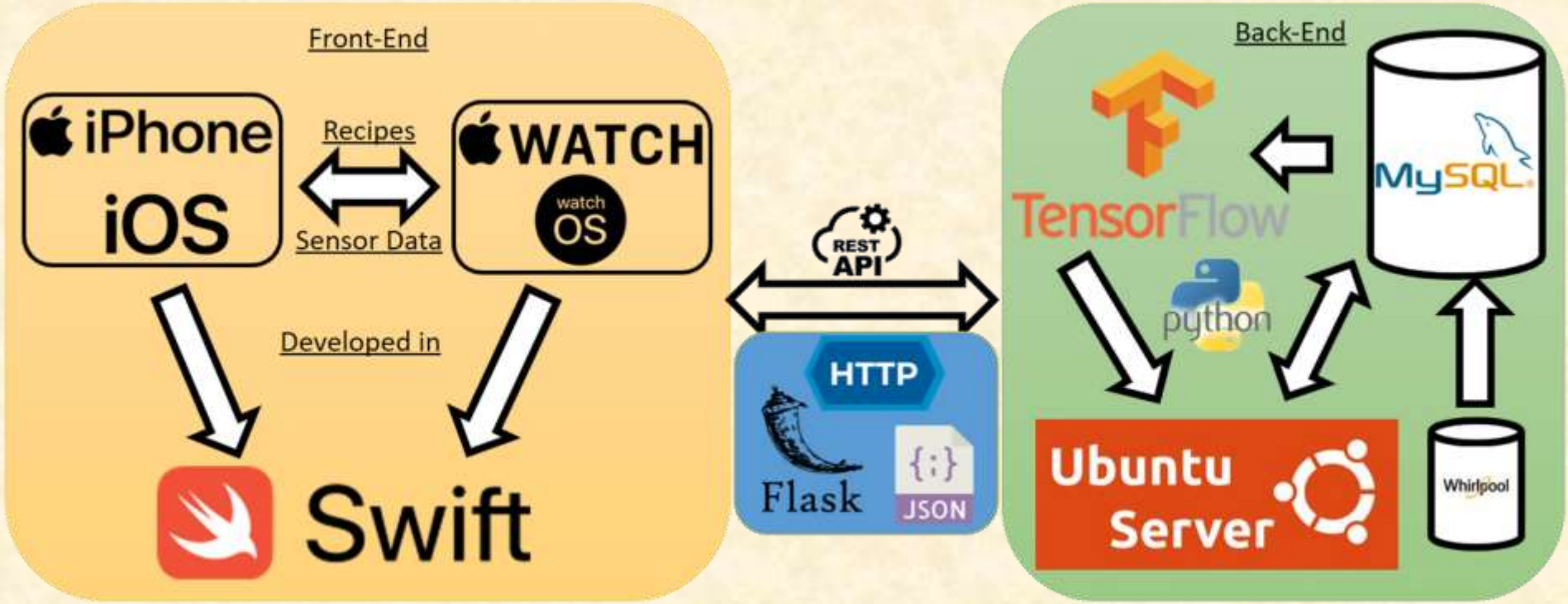
From Students…
…to Professionals

Project Overview

- Motion Sensor Data collection of cooking actions
- Mobile and Watch applications
- Collect and store user cooking data
- Utilize Machine Learning (ML) algorithm
- Develop ML Algorithm
- Identify current step of recipe
- Learn optimal cooking method(s)
- Provide user guidance while cooking

System Architecture



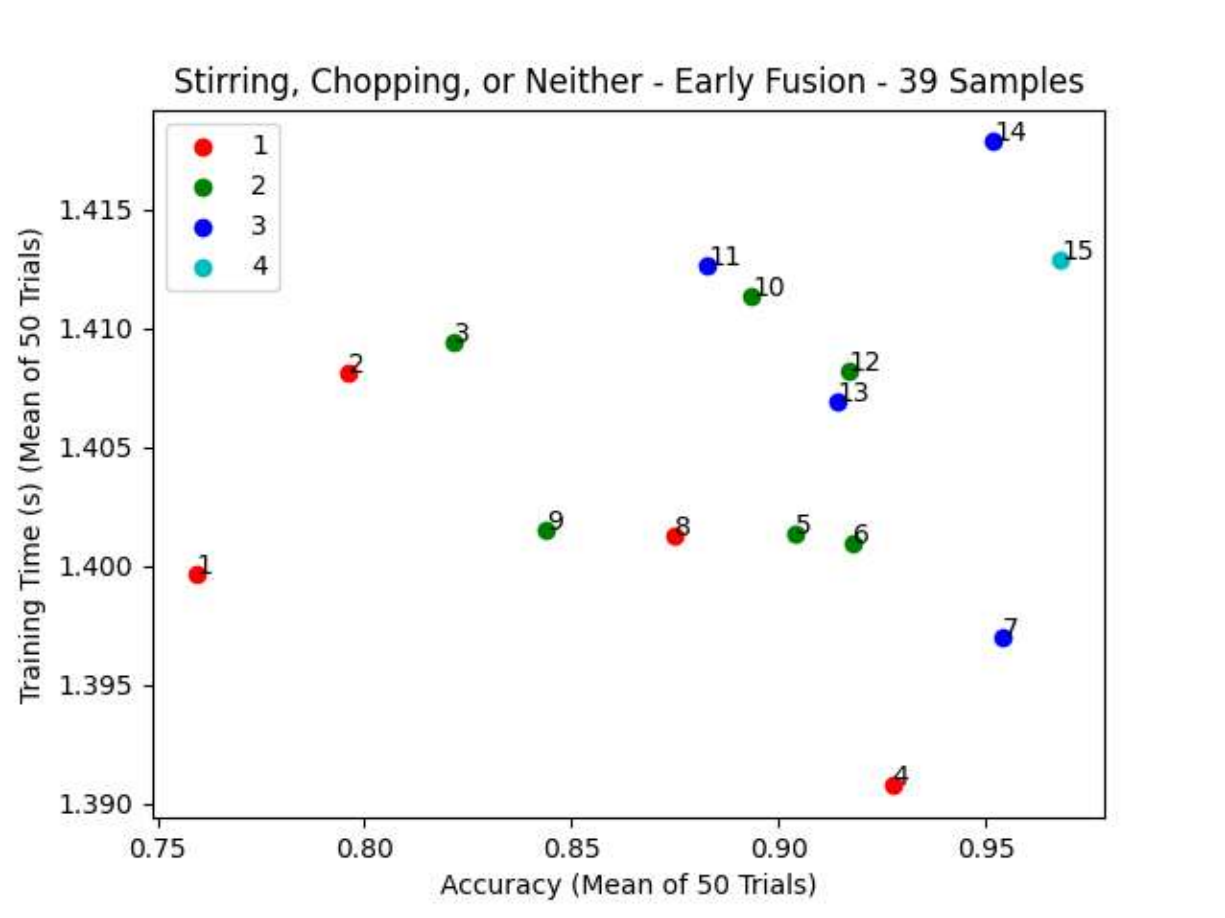
Menu Page

Recipe Details Page

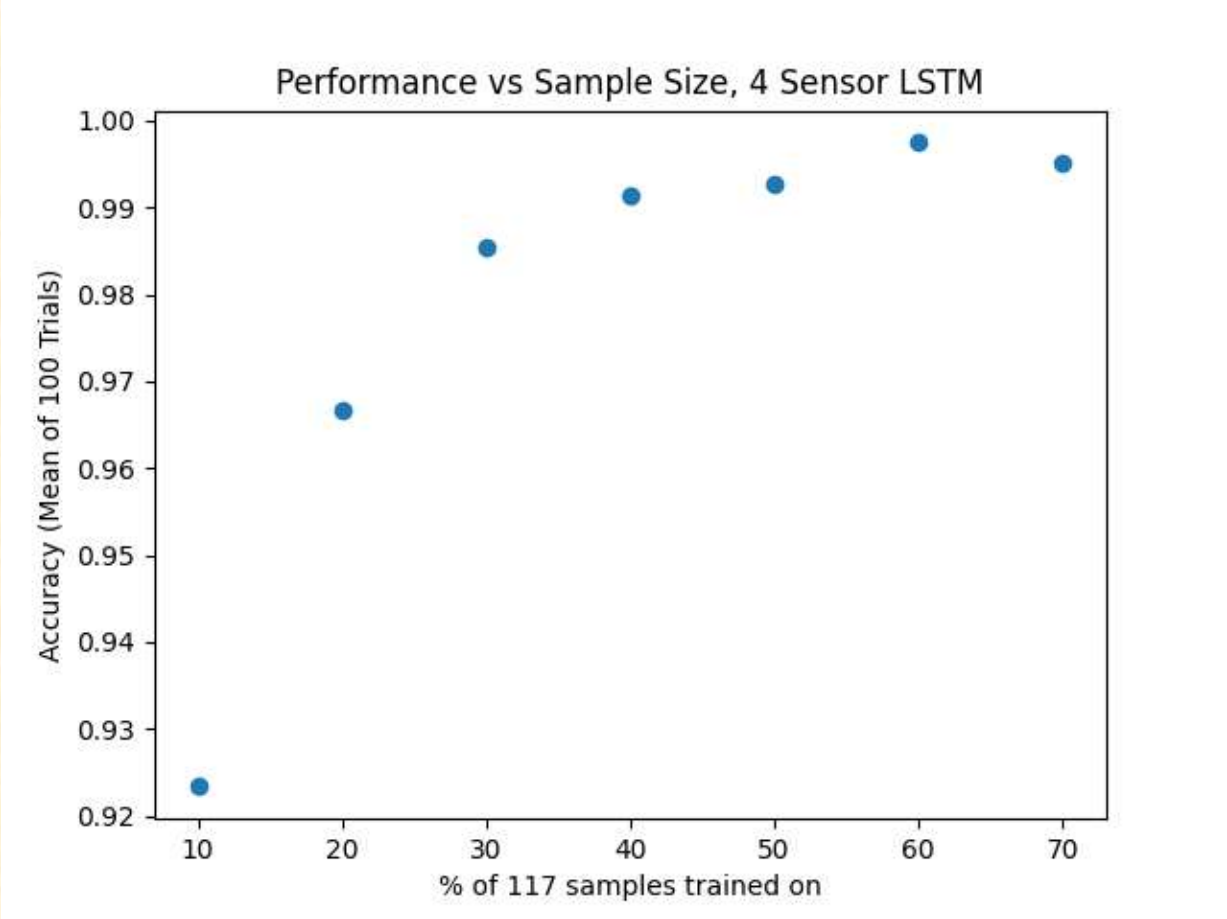
Gesture Motion being Recorded

Motion data being Recorded

ML Model Performance Plot



Sample Size Performance Plot



What's left to do?

- Features
  - Watch face running in the background
  - App to demonstrate real-time ML classification
- Stretch Goals
  - Pruning
  - Further model development & evaluation
- Other Tasks
  - Preventing multiple timers on page

Questions?