

**MICHIGAN STATE**  

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**UNIVERSITY**

# Beta Presentation Rumble Test Suite

The Capstone Experience

Team Vectorform

Andreas Frame  
Anna Quenon  
Hyeungsuk Kim  
Reis Wiedemann



*From Students...  
...to Professionals*

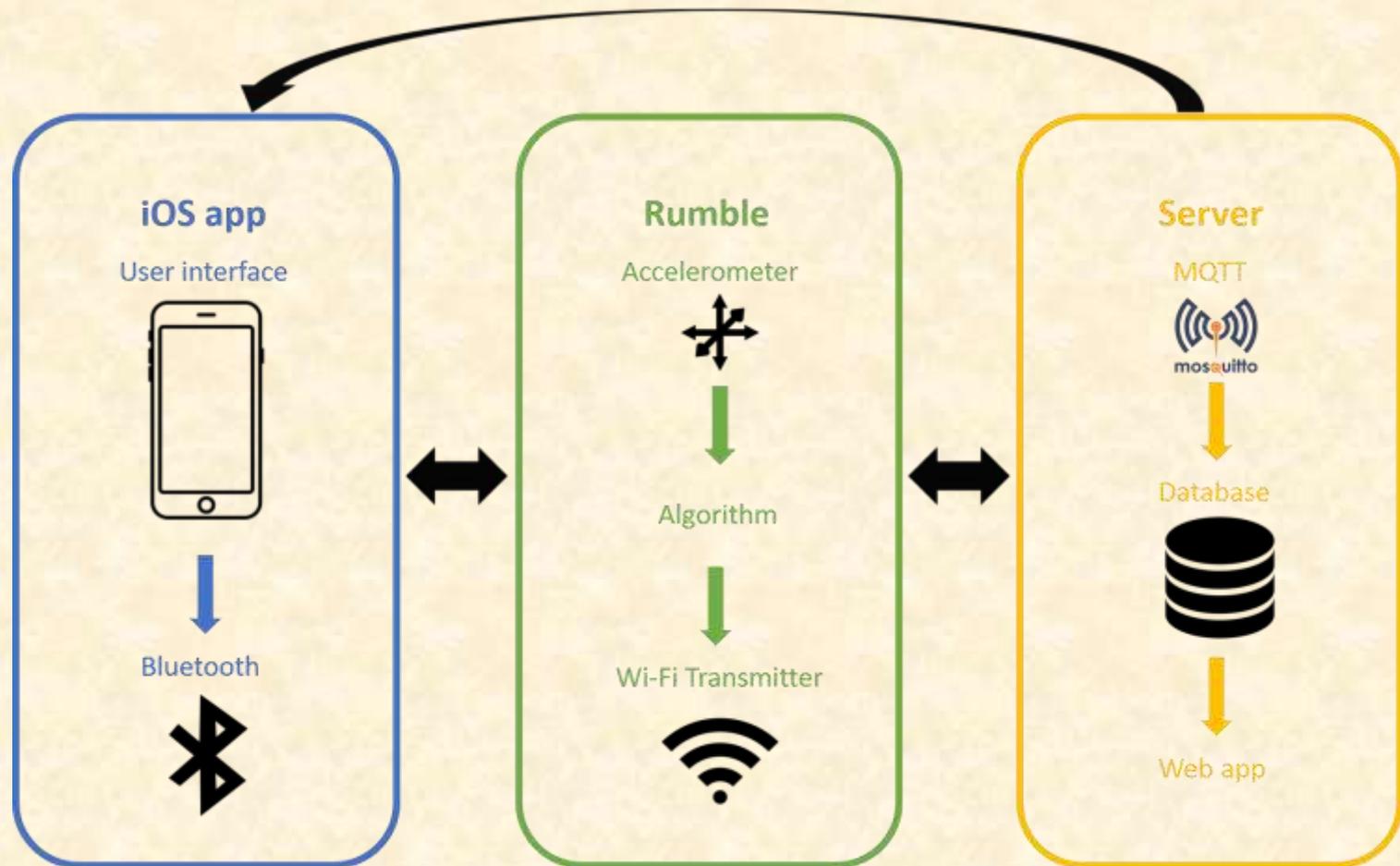
Department of Computer Science and Engineering  
Michigan State University  
Spring 2020

# Project Overview

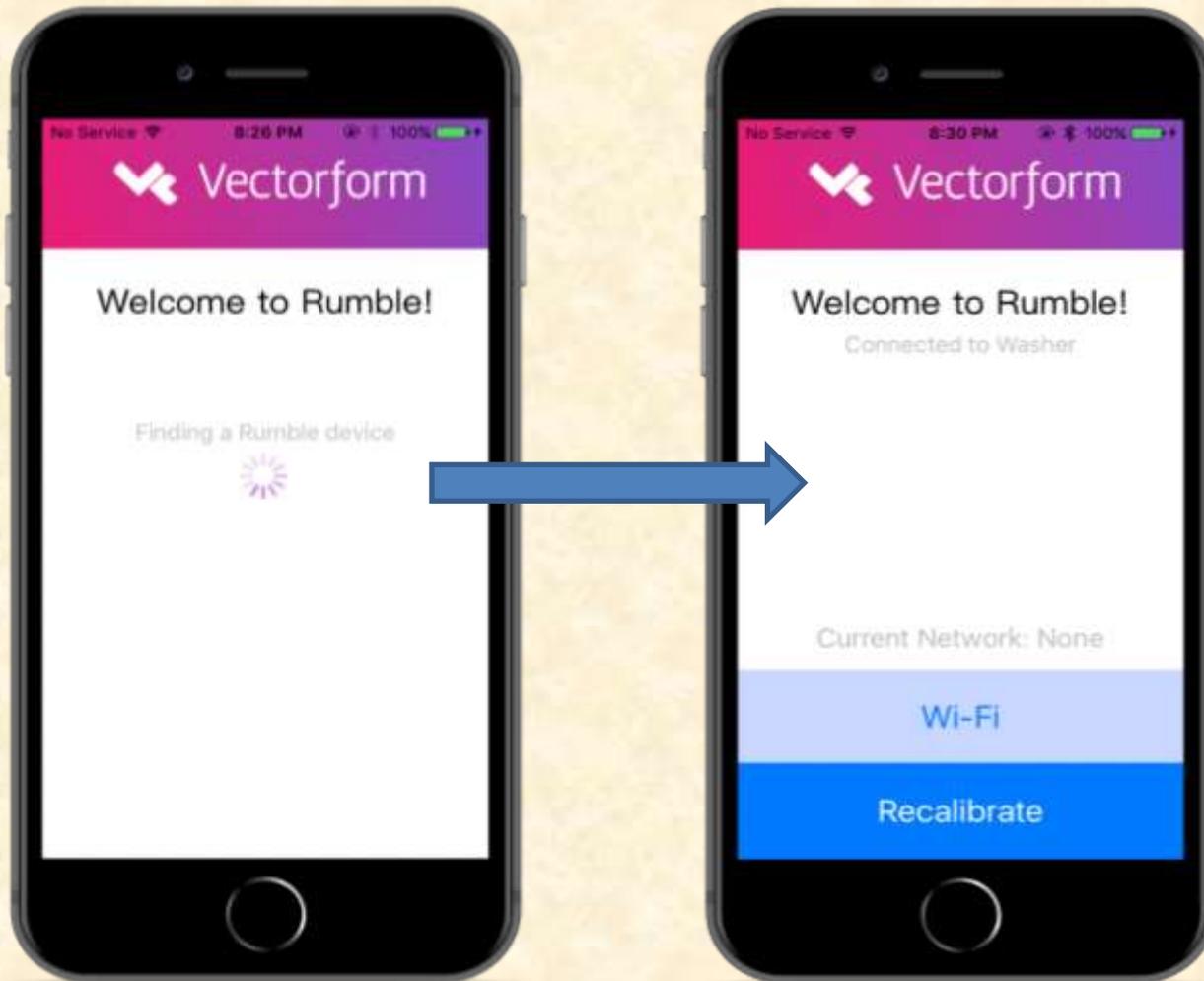
- Rumble device tracks a wash cycle
  - Custom algorithm
- iOS app
  - Connects the Rumble device to Wi-Fi
  - Recalibrates Rumble device
  - Allows for push notifications
- Web app
  - Displays data from each wash cycle
  - Live data



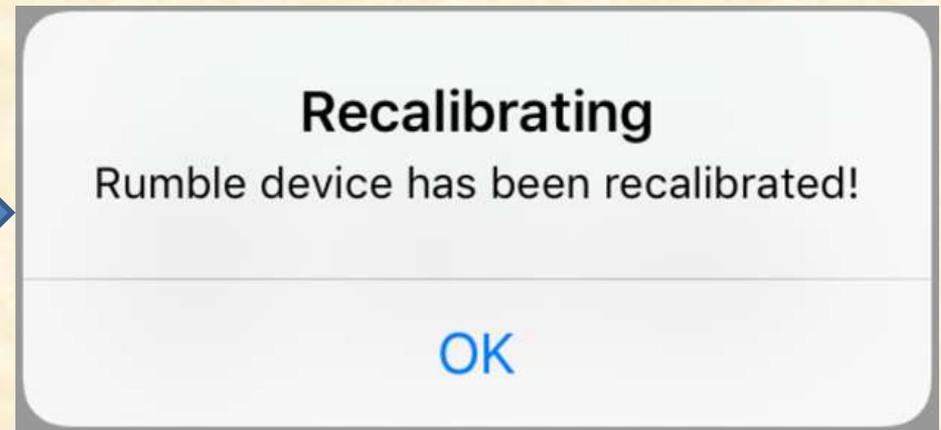
# System Architecture



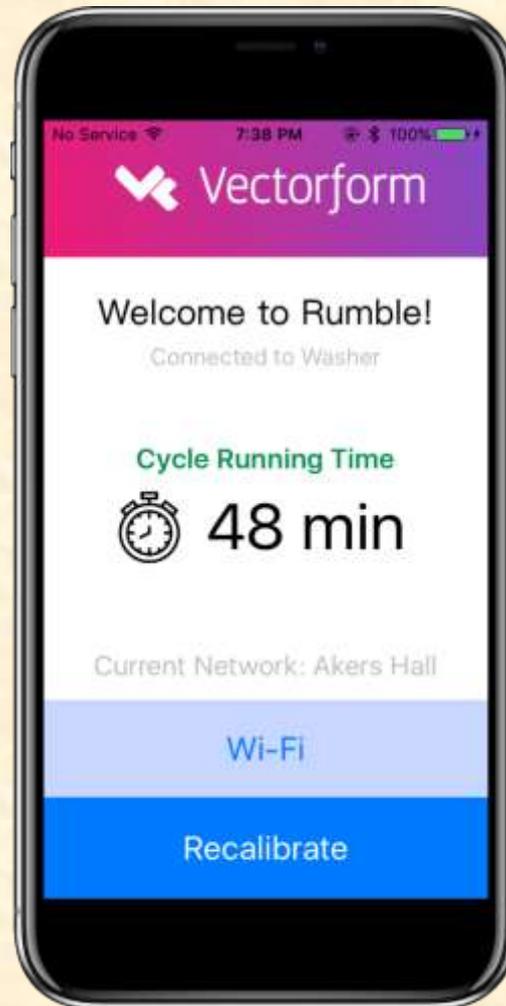
# Finding Rumble Device



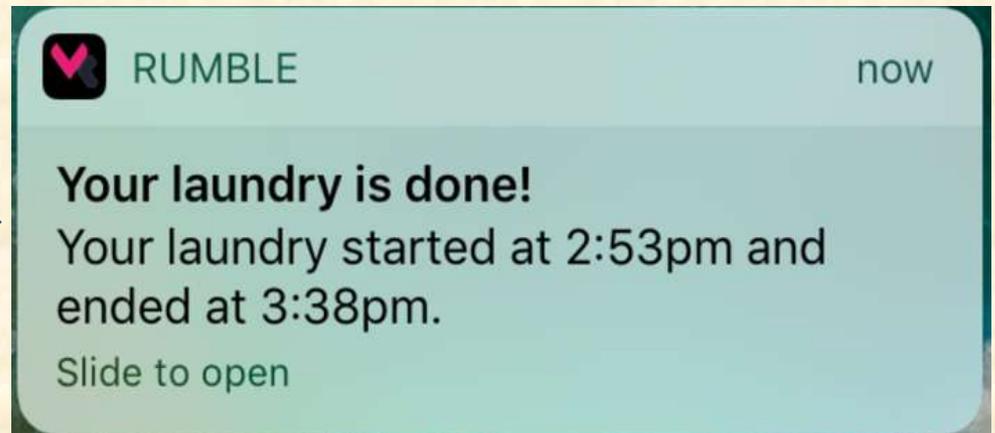
# Recalibration Screen



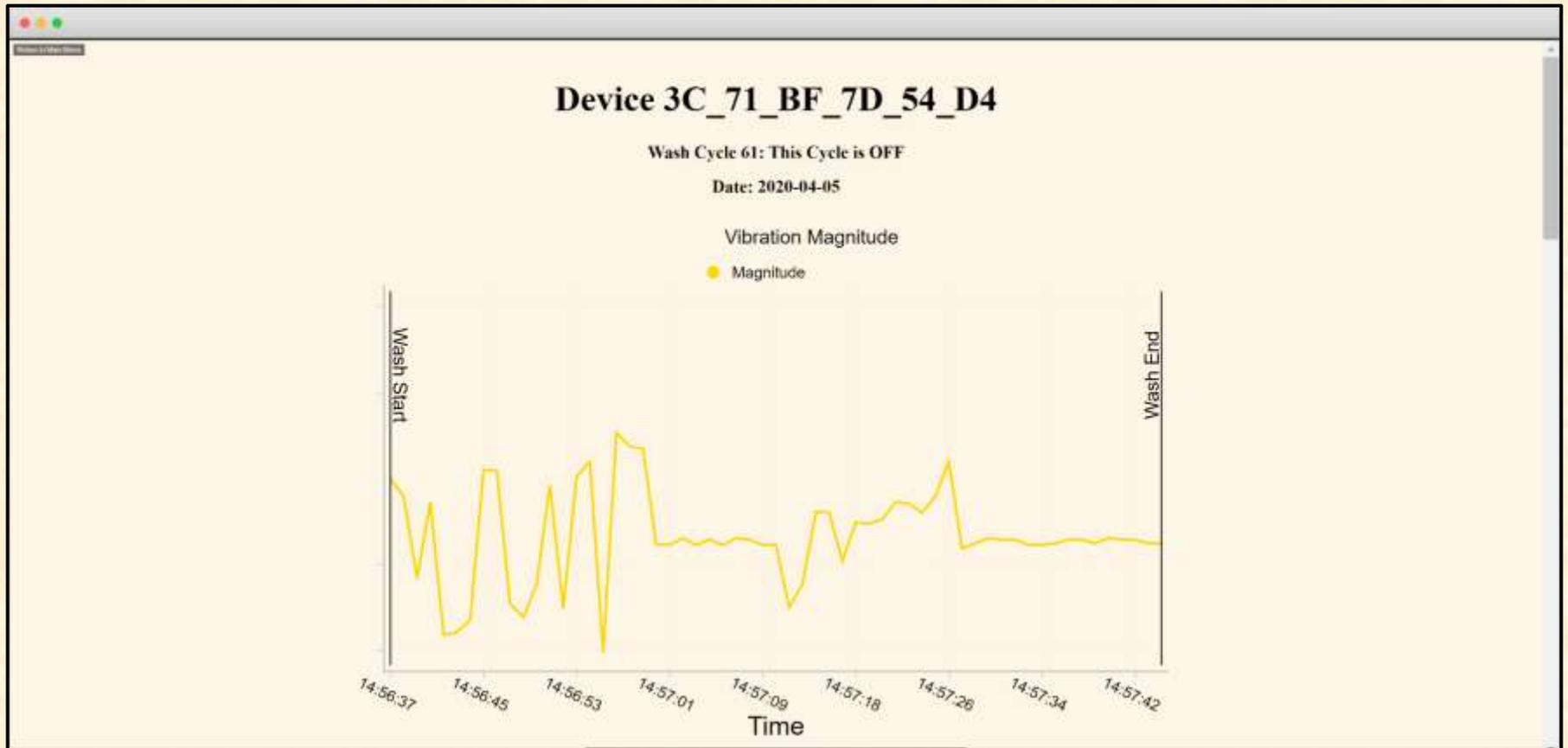
# Wash Running



# Push Notification



# Web application (pt.1)



# Web application (pt.2)



The screenshot displays a web application interface. At the top, there is a calendar for April 2020. Below the calendar is a table with three columns: 'Start Time', 'End Time', and 'Start Date'. The table contains eight rows of data, each representing a 'Wash' event with a unique ID (47-54).

	Start Time	End Time	Start Date
Wash: 47	14:29:44	14:30:12	2020-04-05
Wash: 48	14:31:09	14:32:15	2020-04-05
Wash: 49	14:33:24	14:33:47	2020-04-05
Wash: 50	14:34:27	14:34:27	2020-04-05
Wash: 51	14:35:30	14:35:59	2020-04-05
Wash: 52	14:36:49	14:37:12	2020-04-05
Wash: 53	14:39:32	14:39:55	2020-04-05
Wash: 54	14:41:18	14:41:18	2020-04-05



# What's left to do?

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- Continue to train/improve algorithm
- Small adjustments to website for improved user experience



# Questions?

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