

**MICHIGAN STATE**  

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**UNIVERSITY**

# Beta Presentation

## Automotive Software Integration in Virtual 3D

### The Capstone Experience

#### Team Elektrobit

Dutton, Brandon

Wojan, Tommy

Kania, Logan

Austin, Joshua

Fierro, Alan

Le, Duy

Department of Computer Science and Engineering

Michigan State University

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

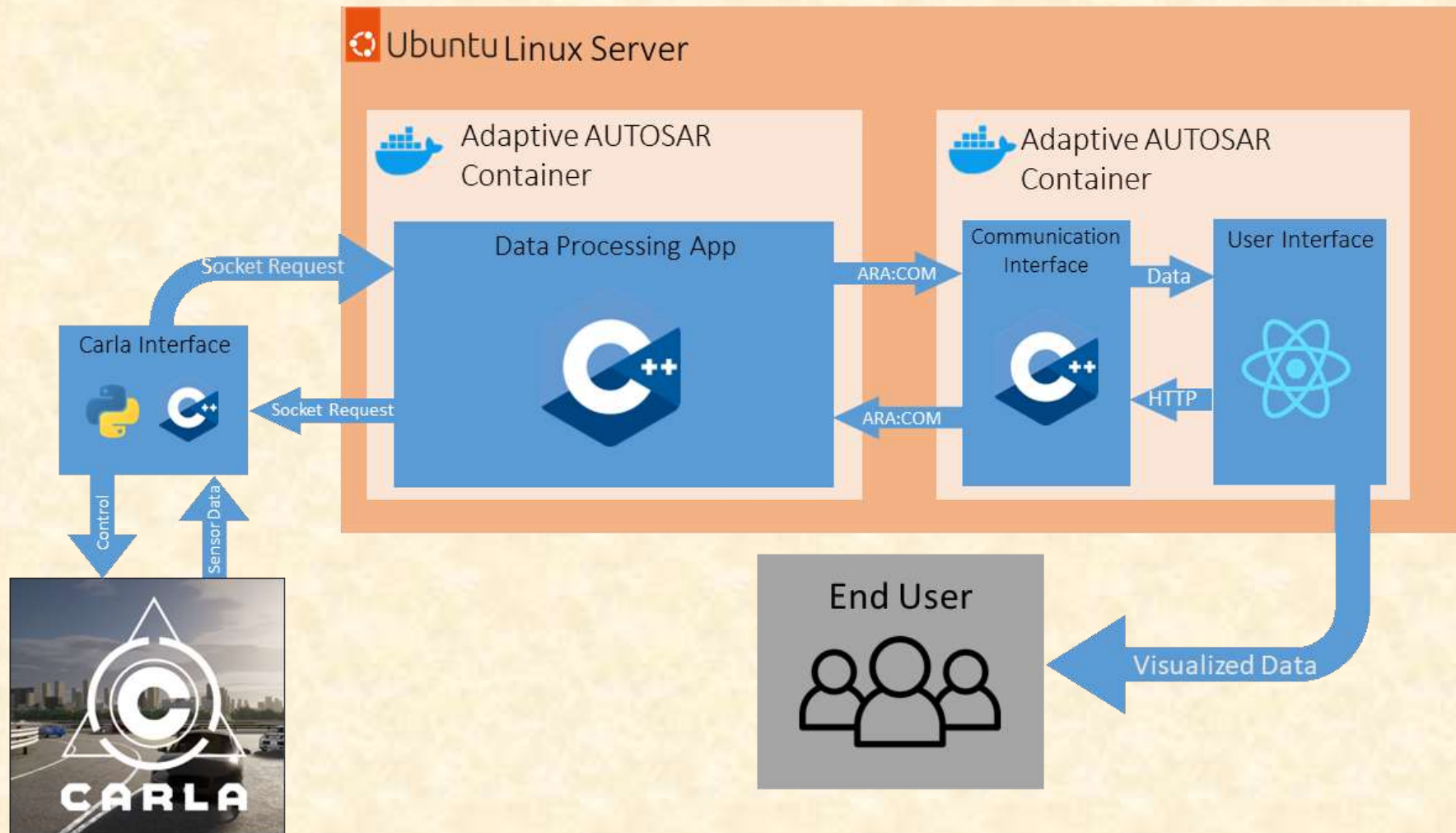
# Project Overview

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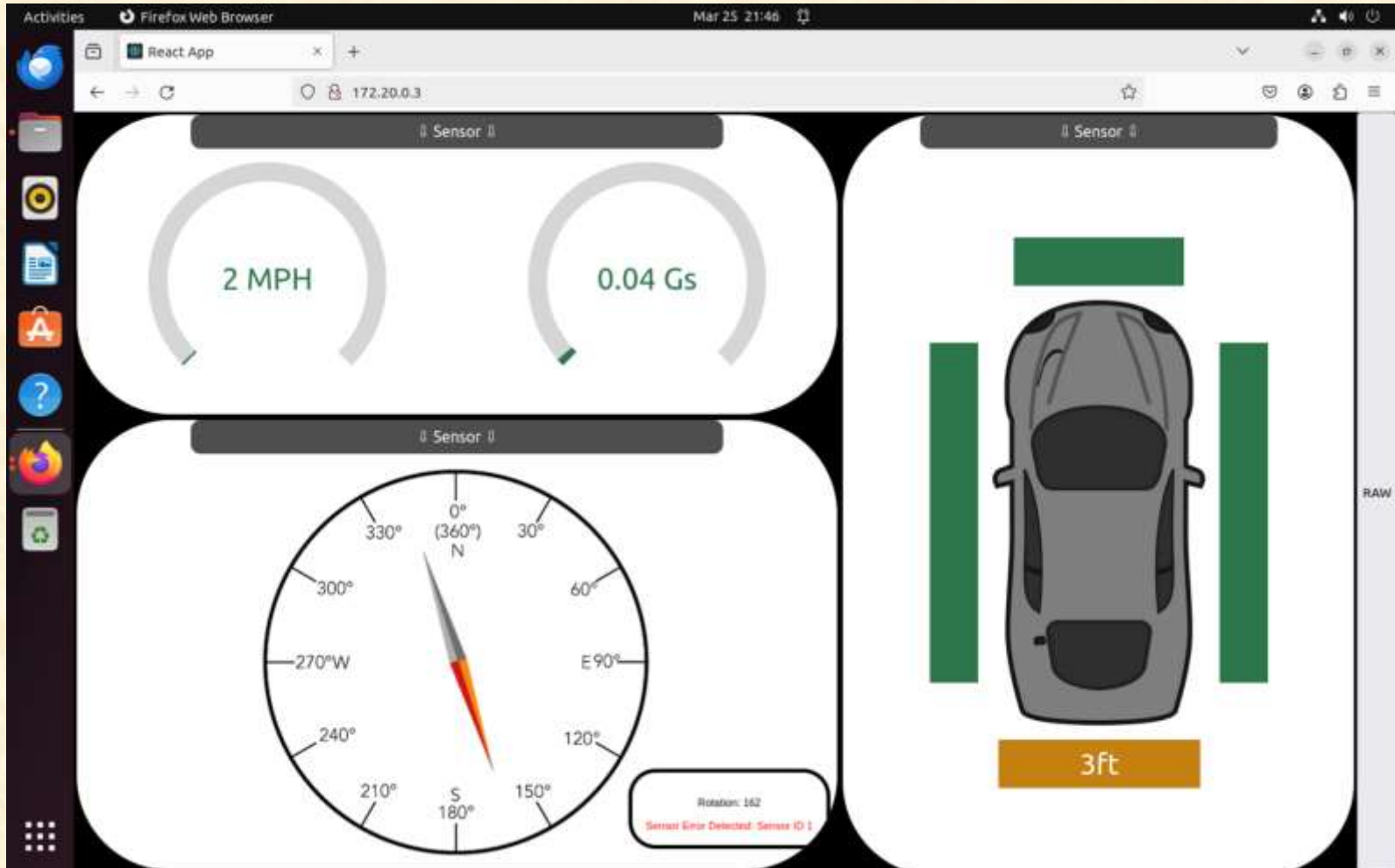
- Proof of concept for HPC Dev-kit
  - Simple, secure, low-latency communication
- Pull data from CARLA sensors to the frontend
  - Data passes through two HPC Dev-kit containers
- Target audience is other engineers
  - Backend logic is far more important than the UI



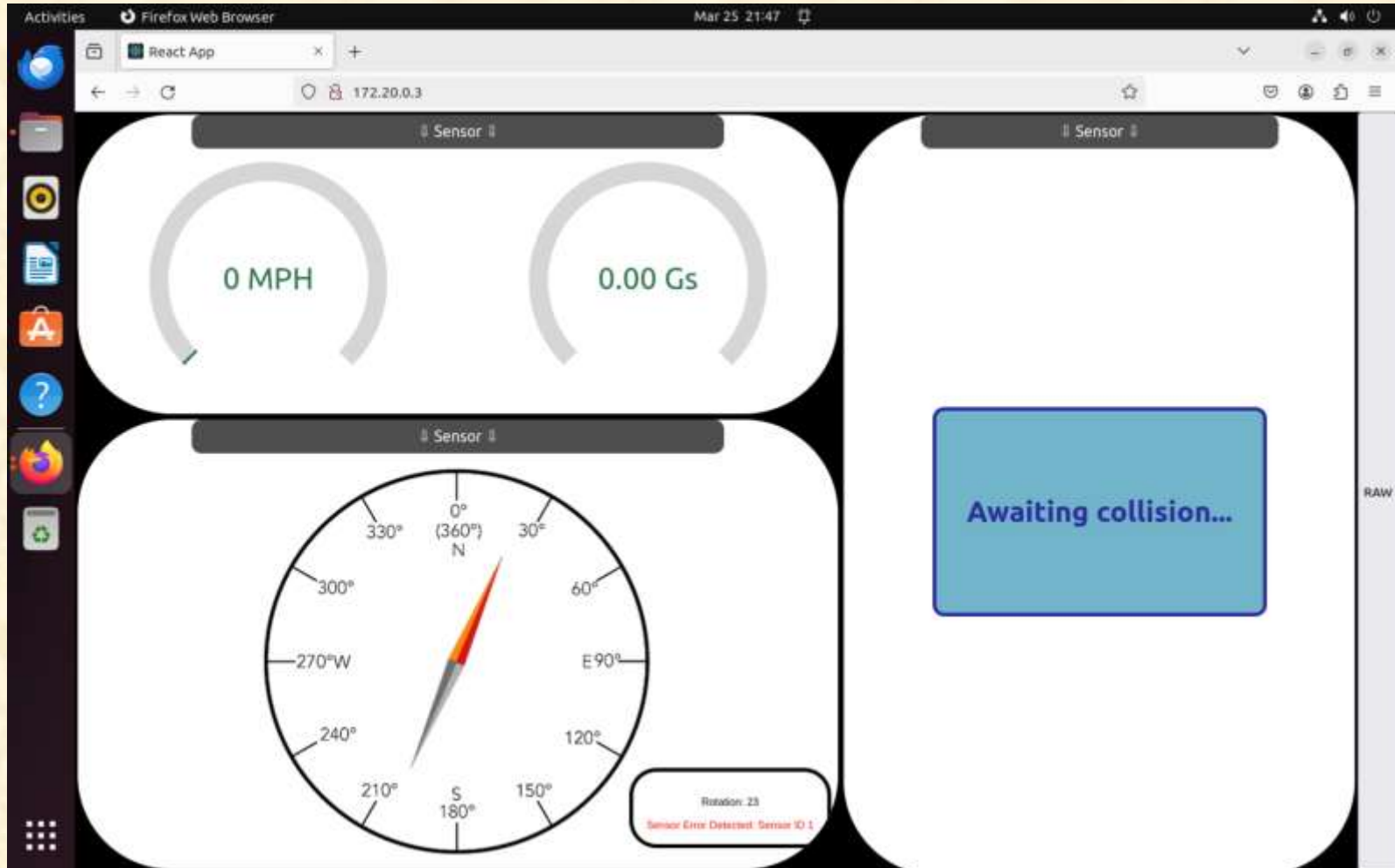
# System Architecture



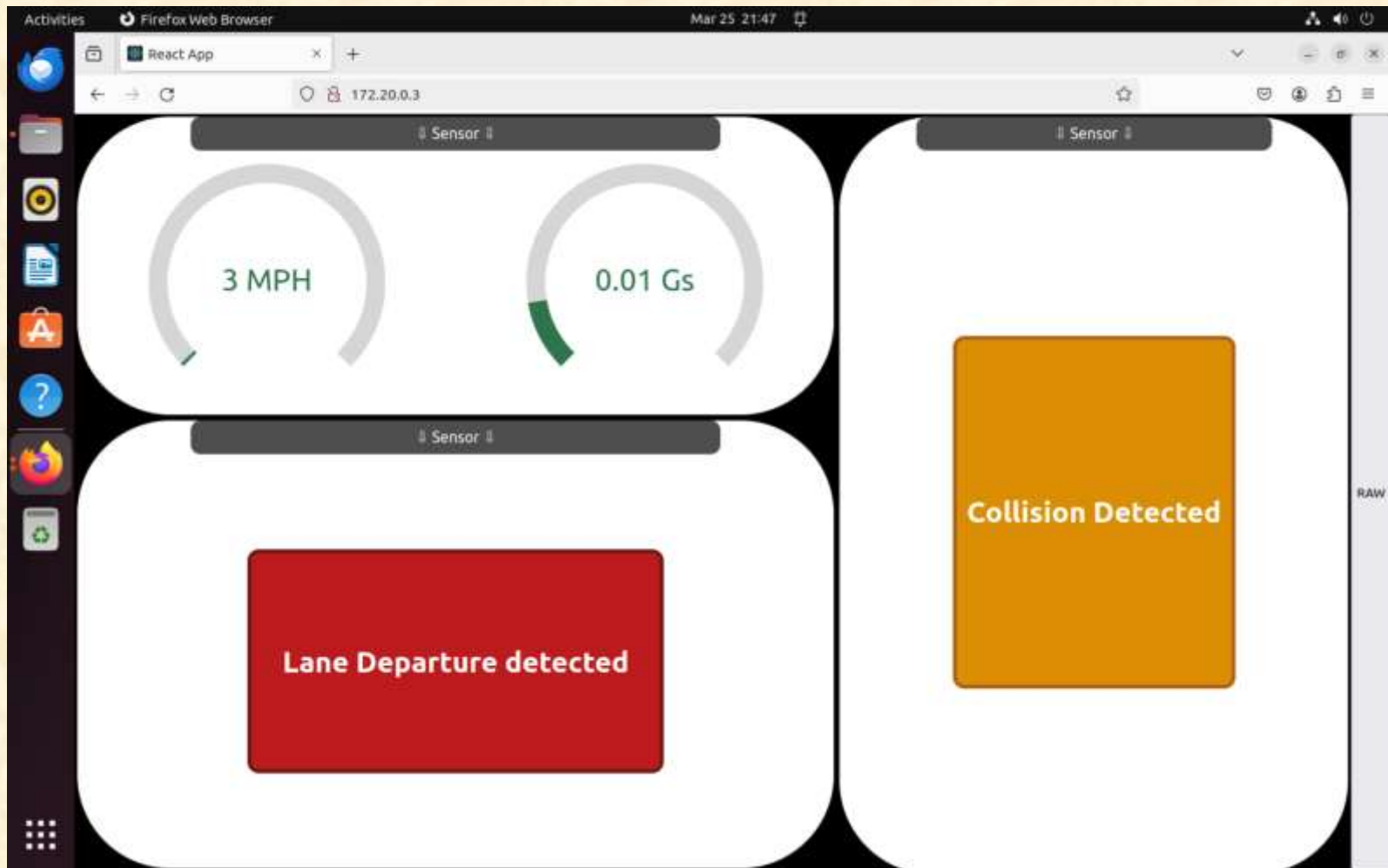
# Main Dashboard UI



# Idle Collision Detector

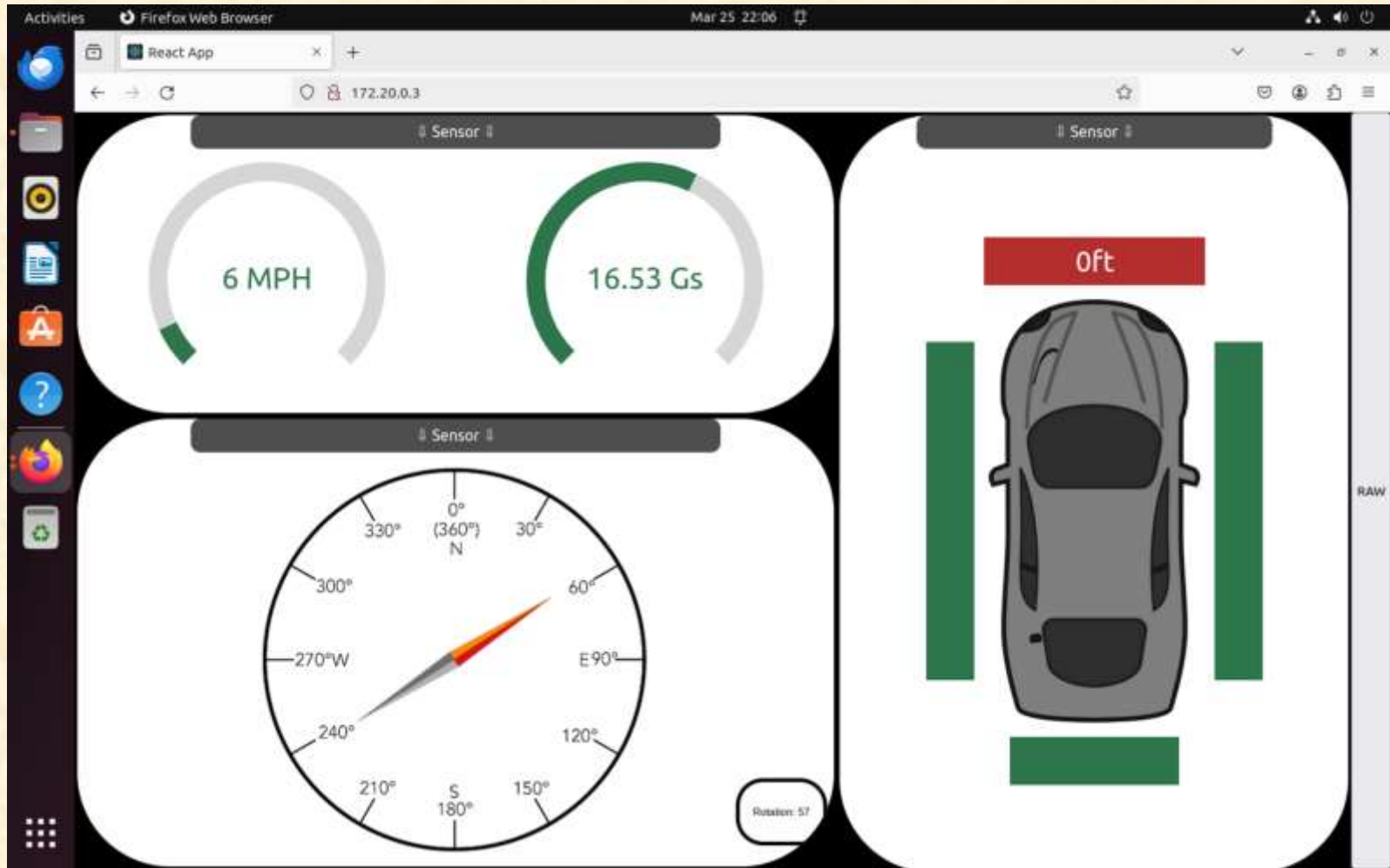


# Lane Departure and Collision Detected





# High G-Force During Frontal Collision



# What's left to do?

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- Other Tasks
  - Code cleaning
  - Bug fixes
  - Create a white paper
- Stretch Goals
  - Add Weather UI
  - Integrate driving wheels for CARLA





# Questions?

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