

Parking Analysis via Image Processing

Presented by
Wi-Fight It



Phase Breakdown

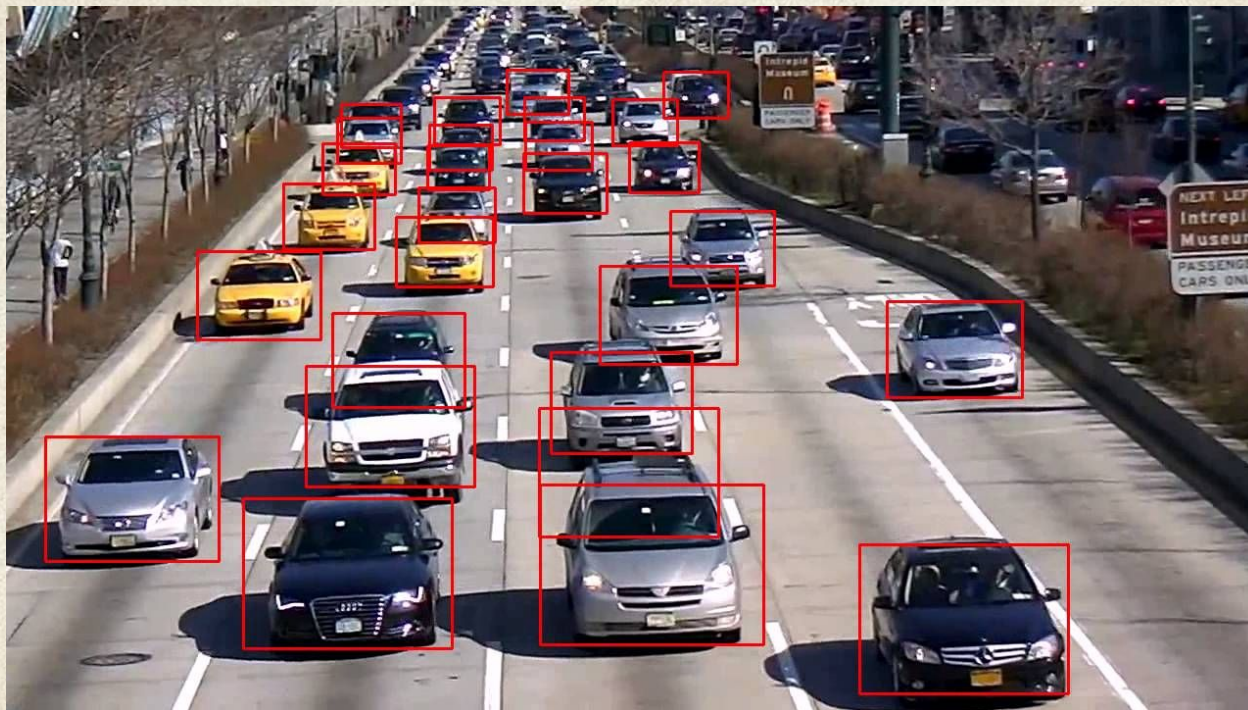
Timeline

- | | |
|---------------------------------|--------------|
| I. Proof of Concept | (Sept.-Oct.) |
| II. Program Implementation | (Nov.-Dec.) |
| III. Online Interface for Users | (Jan.-Feb.) |
| IV. Predictive Models | (Mar.-May) |



Phase I: Proof of Concept

- Testing phase with test footage
- Initial Frameworks
 - ◆ Raspberry Pi with a Wifi card
 - ◆ OpenCV
- Recursive methodology as we search for functional combination





Phase 2: Program Implementation

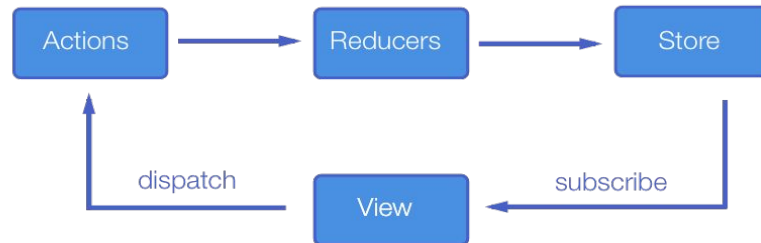
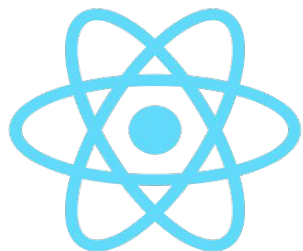




Phase 3: Online Interface for Users

→ Web Application

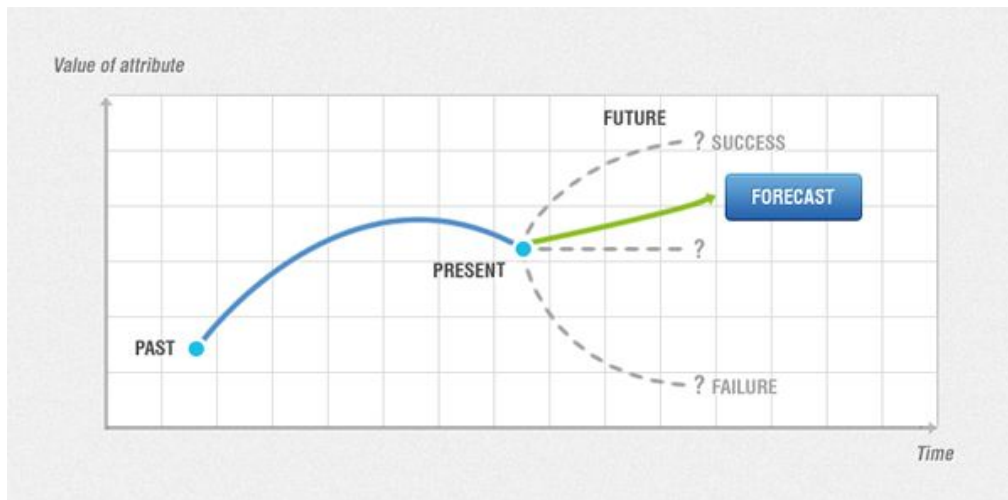
- ◆ React with Modern Redux
- ◆ Redux uses a global store for the application's state, which you can interact with by sending actions.





Phase 4: Predictive Modeling

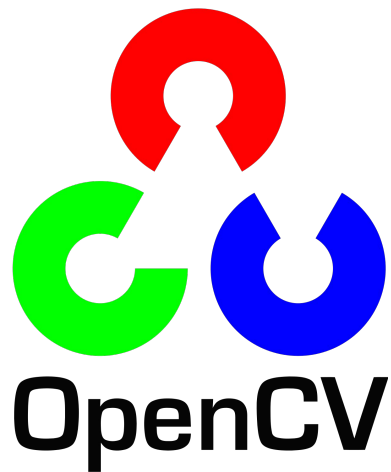
- Forecast Model
 - ◆ Time based occupancy
 - ◆ Direction based movement





Software

Back End



Front End





Hardware

Raspberry Pi



Jetson Nano





Thanks for listening!

Wi-Fight It