

## Technical Debt

Create shared work space for Marcus and I

- Docker on the cloud? PSU space?

GitHub setup

## Backend

Choose and setup database

- Get data in
- Check data import for correctness

Choose framework to use

- Flask?
- Django?
- ?

What Map package to use?

## UI

Create a front end that can run a set of queries

- Show highest percent error
  - At X ft away
  - Remove stops X away
  - With door flag on or off
  - Remove stops with less than X occurrences
  - Sort by date
  - Sort by timestamp

Add “sliders” for accuracy of stops (Show all  $\longleftrightarrow$  Only show highest error) (David ask)

Create a front end that displays maps pins for a single stop

Create a front end that displays pins for all stops

- Create a front end that can click on a stop to get single stop map

Create a front end that can be fed quarterly data and stop info

## Science

Looks for vehicles with consistent GPS issues

Double check accuracy of location\_distance

Geographic effects on gps accuracy

## Other

Create a mastery query that can clean and analyze data is one go

- Or do we just do the stats with python?

Flag for checked or accurate stops

## From Kristin's project slide:

1. What would be of most use to the C-TRAN Operations Planning group would be a comparison of actual and scheduled bus running times, as collected by C-TRAN's CAD/AVL system. Ideally, this

data would be aggregated for timepoint segments at the trip level, for all routes and service types (e.g., weekday, Saturday, Sunday/holiday), over a period of time such as a four-month service period. We would provide CAD/AVL data containing actual and scheduled bus departure times at each timepoint over a particular time period. (David C - C-TRAN)

2. And finally, our CAD/AVL system collects bus position data at five second intervals, which is also referred to as “breadcrumb data.” This data has been used in a few projects, including our SR-14 Bus on Shoulder project, but has great potential, especially for enabling the creation of visualizations. (David C - C-TRAN)