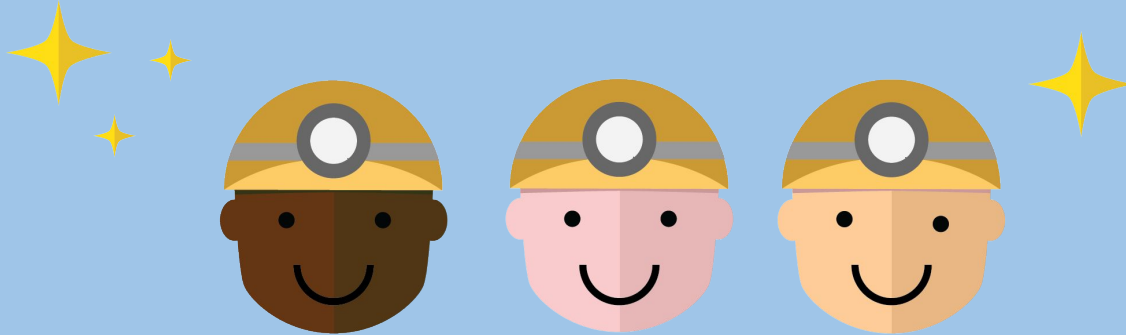


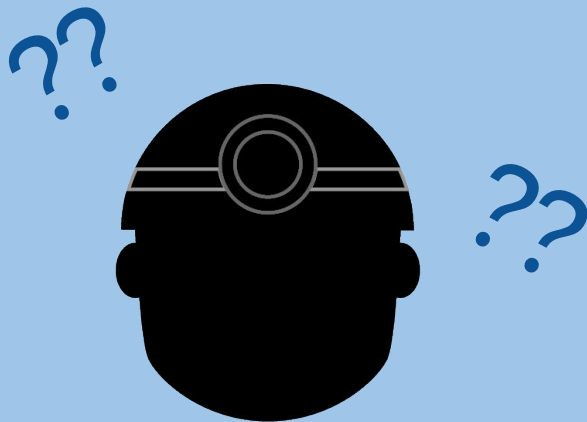
RoxOn, RoxOff

Adaptive Driver Performance Training



Finding the good ones.

- Identify individuals who drive well
- Analyze their behaviors and driving habits
- Adapt this into a training program
- Analyze results of training program to measure success
- If successful, adapt driving procedures to an automated process



Defining quality ✨

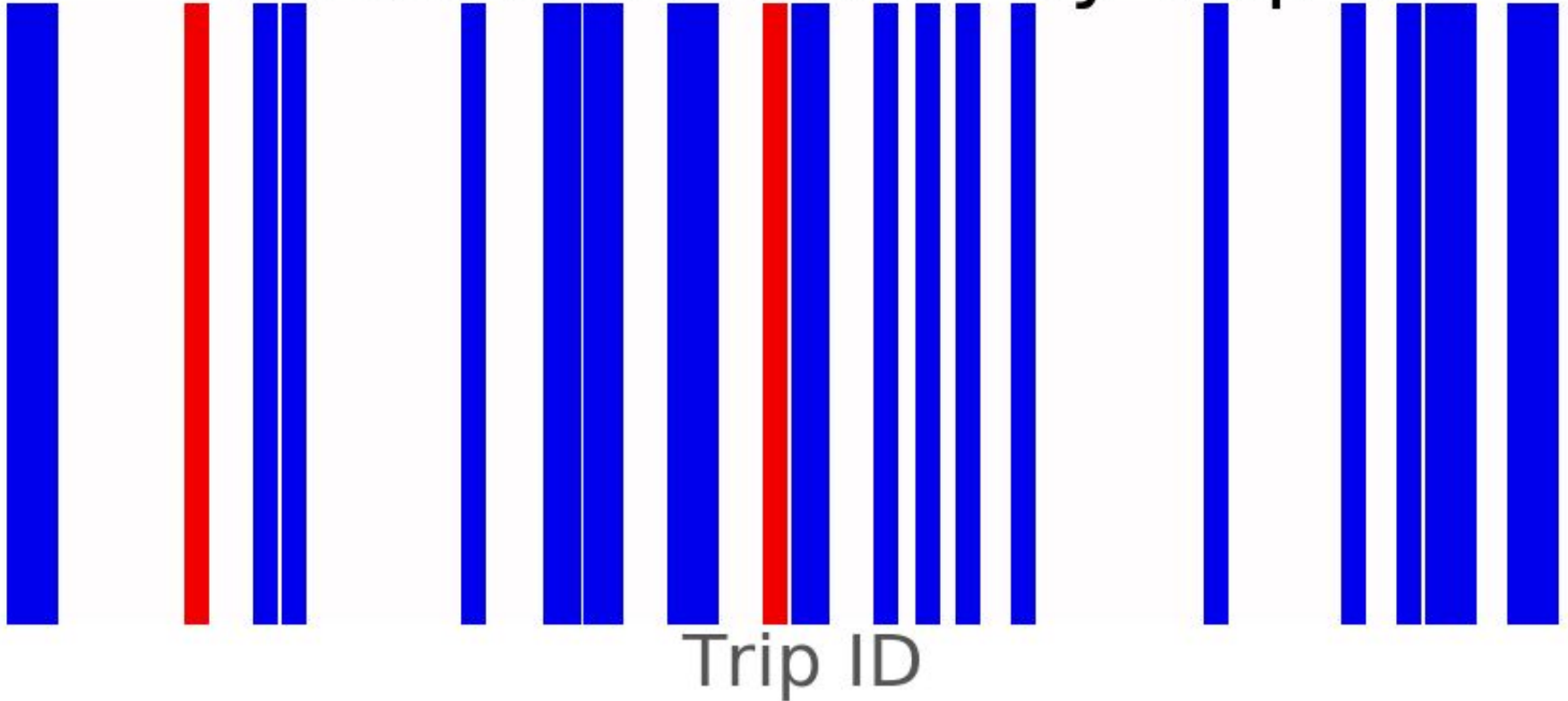
We decided to narrow down on speed versus position in the tunnels for specific drivers.

- Reduces confounding variables across different routes.



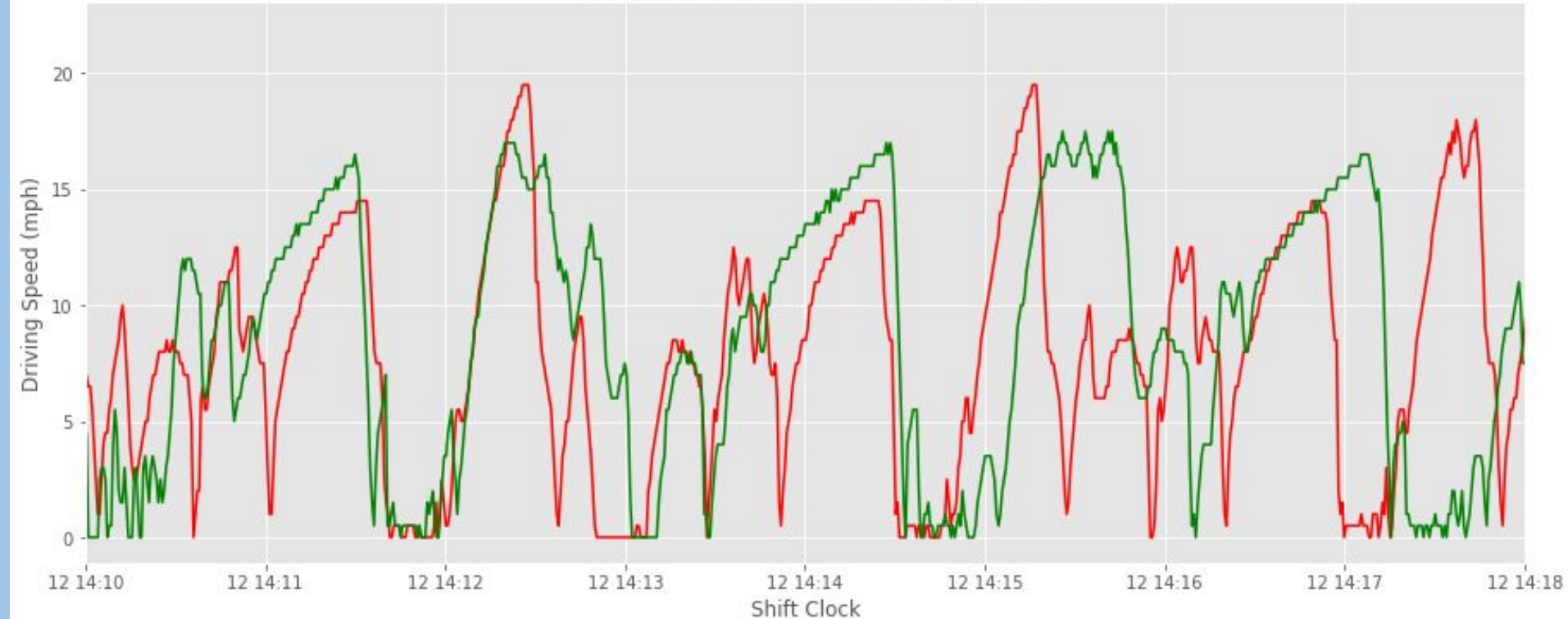
Driven by data

Drivers Scorecard: By Trip ID



Driven by data

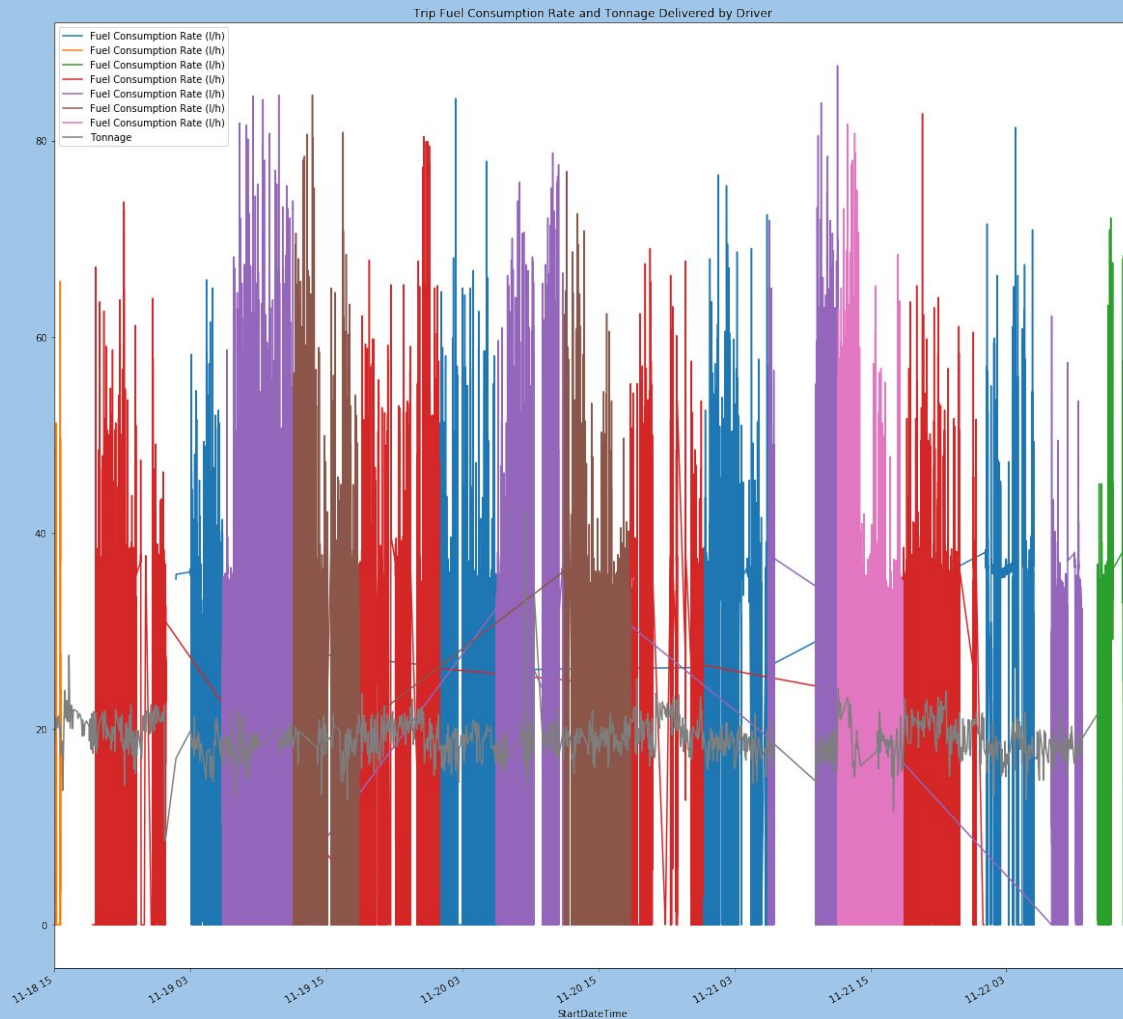
Two Driver Comparison: Velocity Data



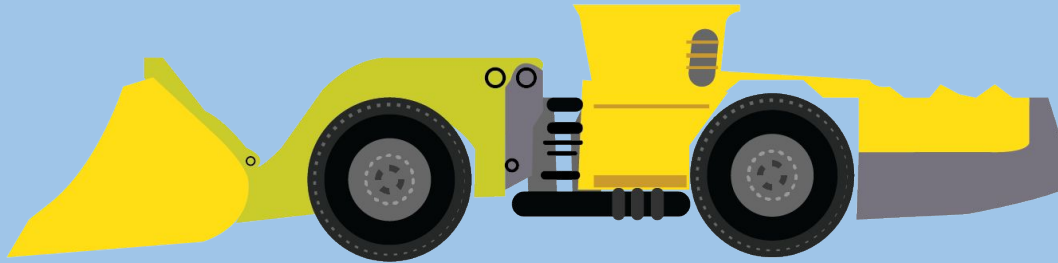
~whoosh~

Driven by data

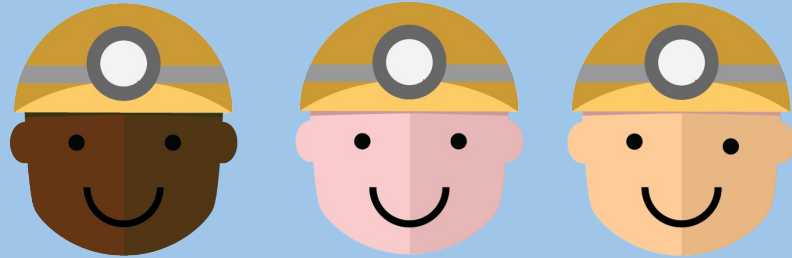
Fuel Consumption Rate
and Tonnage Delivered
by Operator



Adaptive Driver Performance Training

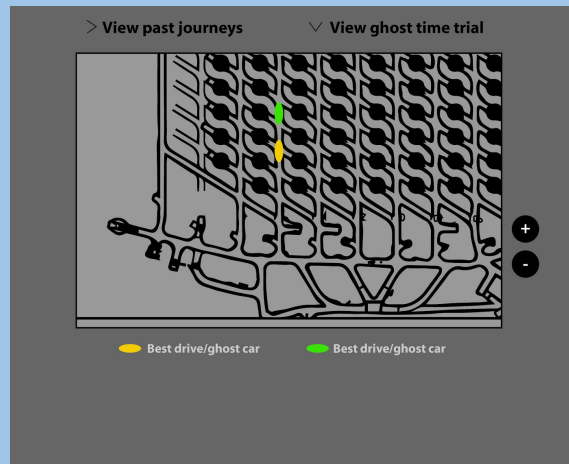
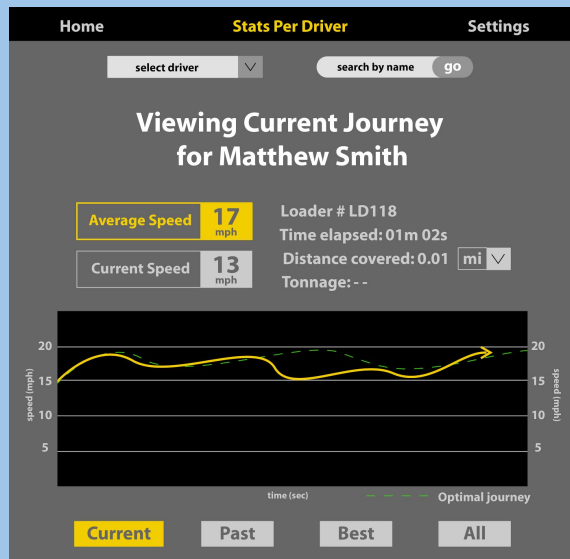


Who's going to use this?



Control Tower + Loader Operators

For the “control room”



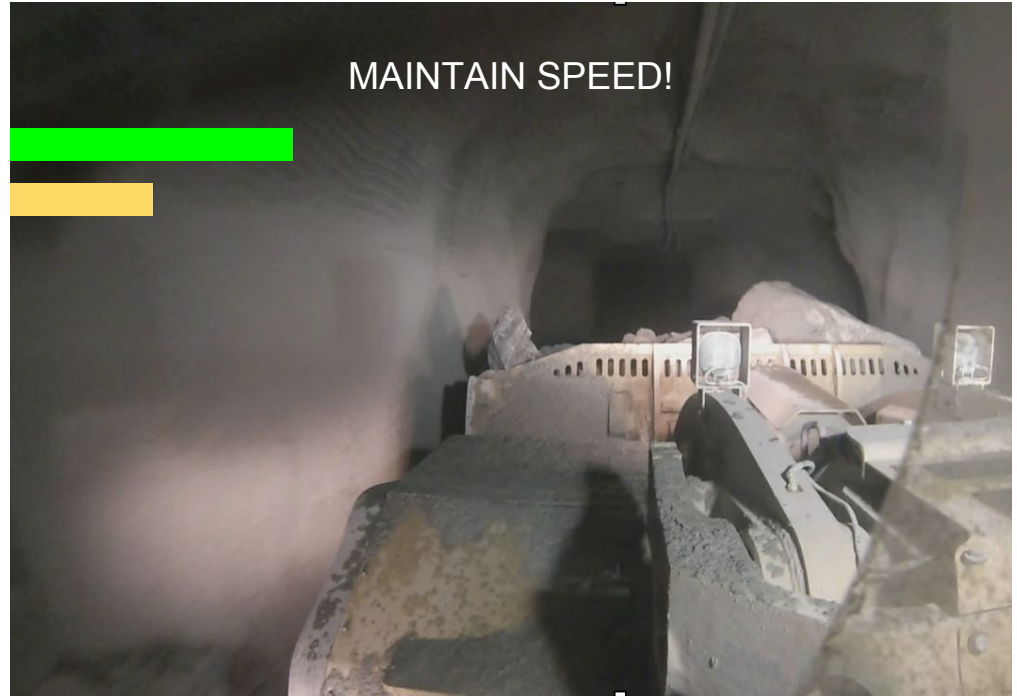
For the driver

- Responsive interface giving feedback on performance



For the driver

- Responsive interface giving feedback on performance



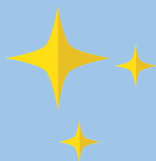
Immersive Simulation Training

Take the data from the good driver tests to formulate a training simulation that tells you how close to the mark you are.

- Safe
- No fuel wasted

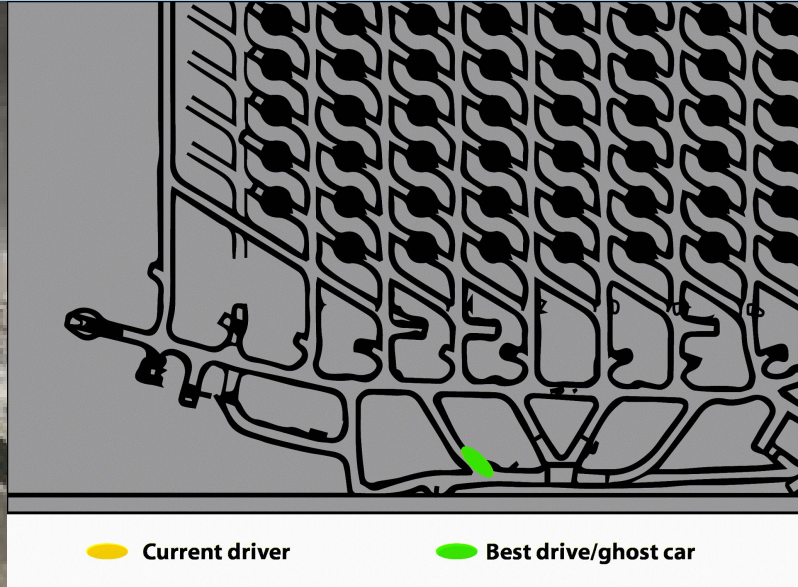
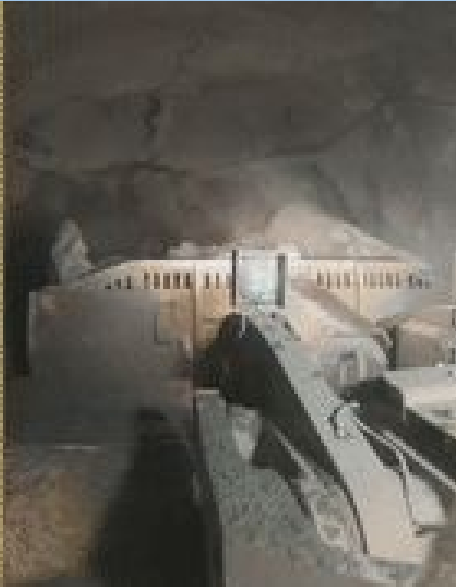
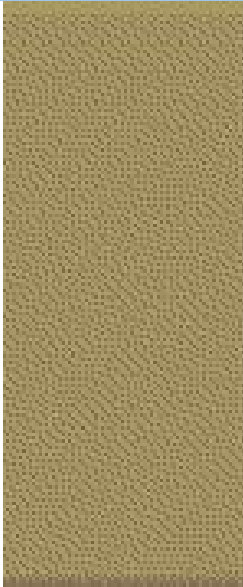
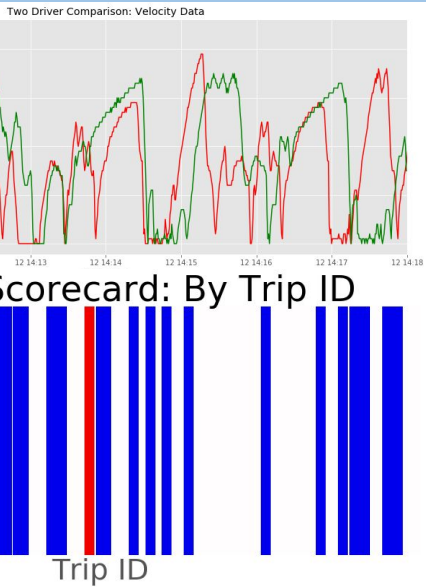
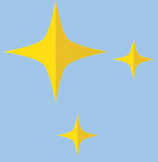


Recommendations for the future

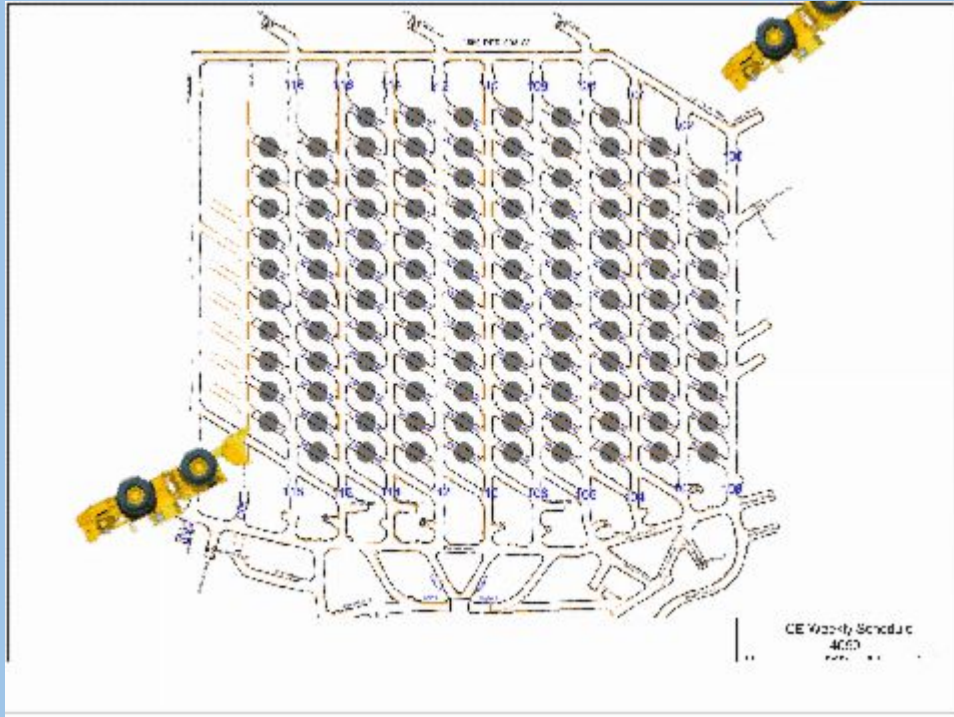


- Tie velocity to geodata
- Test our model with larger dataset
- User test performance feedback mechanism
- Expand the model with more sensors (foot pedal pressure, angle of levers, etc?)

Thank You



Questions?!??



We also developed loaders that transcend space and time apparently.