

27th November

Jeremy

November 26, 2019

Outline

Vehicles

November Plan

Week 1	Writing	Sensor cost emails/research
Week 2	Writing	Try standard classifiers
Week 3	Verification plot 1	Collect strain
Week 4	Verification plot 2	Classifiers

- ▶ Writing
- ▶ Pier displacement
- ▶ Speed up response calculation
 - ▶ Traffic (vehicle) sampling **much** faster
 - ▶ Response to traffic via matrix multiplication
- ▶ Collect distribution of responses
- ▶ Quantify distribution of responses
- ▶ Verification
 - ▶ Plot for each displacement sensor
 - ▶ Regression plots
 - ▶ Convergence plot

Goal	Note
Strain verified	
Pier displacement verified	Against AxisVM
Add temperature to model	"Noise" in classification
Add cracked concrete to model	Small change (change E)
Another better classification example	
Mesh refinement, obervy material properties	Improves model accuracy
Mesh refinement, more dense around load	Improves model accuracy
Choose number of unit load simulations	Parameter selection
Parallelization	14days -> 4days
20k good words (12k current, 10k good)	Pre-alpha draft