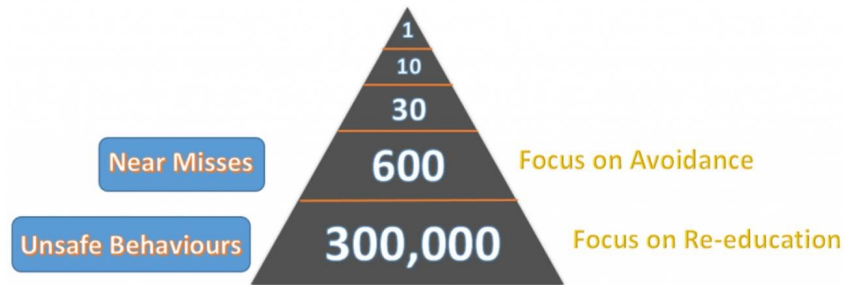


Safety: Start at the Bottom and Stay There!

Evan Trevathan

Goal

Predict likelihood of the next safety incident being a recordable incident using "Heinrich's Accident Pyramid" theory.



Data

1. The dataset considered was the SafetyApp data:
 - Excluded all records that were soft deleted.
 - Pulled data on 4/18/2018
 - 10,698 rows
 - 88 original features
 - Utilized 13 features from original dataset plus 1 feature from Asset table.
 - Created/Altered 4 features
 - All data manipulation performed in SQL
2. Could utilize the SafetyPlus data if necessary:
 - Would need to map to selected feature set.
 - 28,506 rows
 - 562 original features

Approach

Implement Multinomial Time Series Regression to model the likelihood the next data entry point is a recordable incident. We will classify the data as either recordable or non-recordable and utilize the ratios from Heinrich's Accident Pyramid theory applied to BP Lower 48 Safety entries.

Project Progression

1. Feature selection and creation done.
2. Dataset loaded into Pandas.
3. Research has begun on algorithm details.