Predicting Forest Cover Type

Lucy Hayes

Obtaining Data

- UCI Machine Learning Repository
- Roosevelt Forest CO, USA
- Cover Type, WildernessType

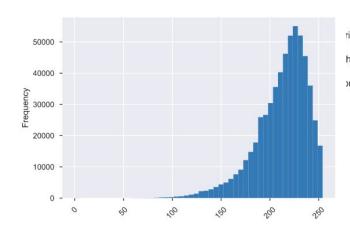


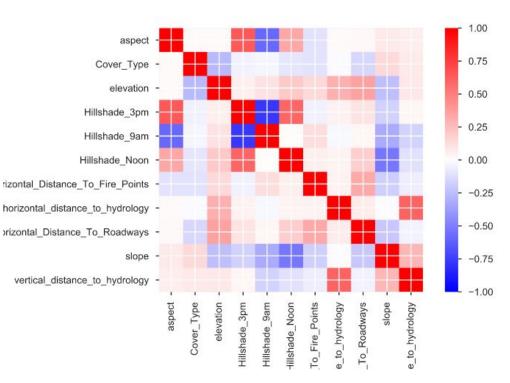
Scrubbing Dataset

- Rename Columns
- Downsizing Dataset
- NAs and Empty Variables

Exploring Data

- Skew
- Collinearity

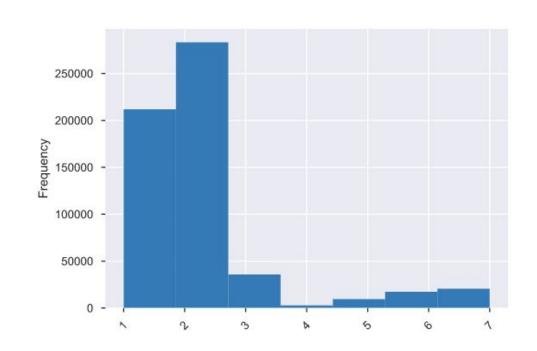




Explore

- Low Data for Soil Types4, 5, 6, 7.
- Sample of 50000 for computational efficiency

Cover Type	
1	18077
2	23518
3	3125
4	244
5	836
6	1466
7	1734



Model

- Decision Tree
- Random Forest
- GridSearchCV



Interpret

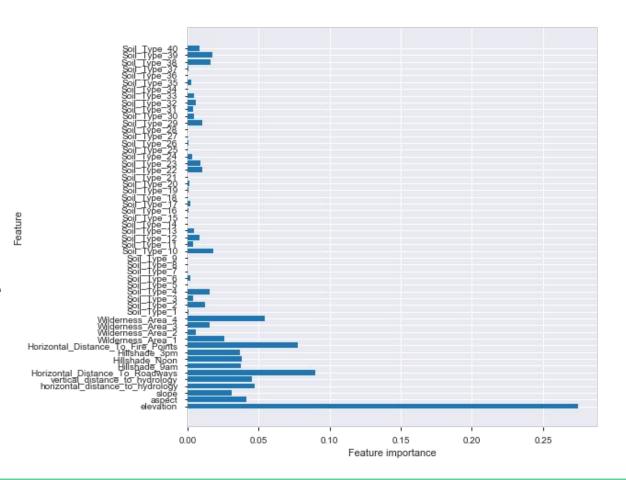
Decision Tree: 82%

Random Forest: 86%

Features:

• Elevation vs. Soil Type

Predictions vs Outcomes



Future Considerations

- Using Larger Dataset
- Adjusting for Normality/Skew and Collinearity



