Yuha Yi

Stats 517

Final Project Evaluation

Final Project Critique for Dalyn McCauley – “Predicting Ground Heat Flux & Humidity Sensor Error from Meteorological data

**Coverage of 3 course areas** – Supervised/Cluster/Association – All three areas were covered. The selection of the target variable was useful, such that the study of it could help solve real world problems. The data is interesting and useful. Results are easy to read and provide useful visualization to help the reader. Feature selection process is explained well. Although the clustering seemed to give questionable results, this was explained by Dalyn. Clear visualization in method selection and results for the clustering section. The transition in explaining how the association worked for the project was explained in how it relates back to the problem being solved in the project.

**Dataset size needs stated criterion** – The data totaled 171,880 observations from 17188 samples and 10 variables. The data was gathered from 12 days of data averaged over one minute in 2017 as showed in the presentation.

**Relevancy** – The questions expressed are able to be applied in the real world. The usage of statistics was embedded well in this dataset of meteorology. Future work was included to explain how machine learning could be used on arduinos that are programmed to measure the weather.

**Difficulty** – On a scale of 0 – 10 with 10 being the most difficult this project is a 10. The size of the data is immense, the variables have high complexity in understanding, and the question the project answers are solutions that multi-billionaire companies are attempting to seek. However we see here that Dalyn is able to accomplish this on her own.

**Interestingness** – It is refreshing to see a new subject of geological data to be used in statistics. 10/10

**Clarity** – Presentation showed only what was important. All of the visualizations were selected carefully to give a precise overview of what was done for the project.

**Originality** – This study appears to be something that has not been done before. The data seemed as if it was grabbed from devices that were programmed by the user, not pre-programmed.

**Creativity** – Very unique.

The presentation was very organized and explained in a way for everyone to understand regardless of their knowledge in geology. All visualizations had a purpose and were explained with clarity.