A SF Permits Cleaning

4 points

- Download the Building_Permits.csv from Kaggle
- Clean the San Francisco Building permit dataset
- Use imputation were necessary

B SF Permits Exploration

6 points

- Explore the data. Which columns correlate strongly with the "Current Status" column? How do other columns correlate to each other?
- Describe problems with "Current Status" as a target column to predict. Can you construct a better target column?

C SF Permits Prediction

6 points - Predict the "Current Status" or your substitute column from B from the other columns. - Drop unessecary columns - Construct one-hot encoded dummy columns - Choose the Predictor of your choice

D SF Challenges

4 points Describe challenges you faced during A, B and C and how you solved it.

E Neural Networks XOR

5 points We described a neural network that represents an XOR gate in class.

- Write down a function, that consists of all modular parts of that network. Use the functions of AND, OR and NOT and stitch it together.
- Use explicit weights, for example the ones we used in class.

F Neural Networks Overfitting

6 points

- Train a neural net and overfit it to cifar.
- Don't use any regularization.
- Don't use my crappy implementation, but use keras. Use the train and test splits in the data do evaluate the model.

G Neural Networks Overfitting

6 points

- Train a neural net and prevent overfitting by regularization.
- You can use any combination of regularizers we saw in class.
- Use the train and test splits in the data do evaluate the model.

H Feedback

3 points

- How much time did you work on this assignment and how often did you meet?
- What was your favourite excercise? Why?
- What excercise did you like least? Why?