MGMT 638

Session 11

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Agenda

- Model interpretability
- Neural networks

Model Intrepretability

- Use lightGBM trained on all monthly data 2011-02 through 2025-10: lightGBM.pkl
- Use 2025-11 features: currentdata.xlsx
- Why is the model making the predictions that it is making in 2025-11?

Interpretability notebook

Neural Networks

- Model structure
- Classification vs regression
- Digits example
- Confusion matrix
- Increasing complexity and performance

Neural networks notebook

Tell Claude:

Get the breast cancer dataset. Explain it, including how the target variable is coded. Train a neural network and evaluate it on train and test sets. Display the confusion matrix for the test set.