

# COSC 410LA S25 Lab 4: Hyperparameter Tuning

This Lab is due **Friday, Feb 28, 2025 at 11:59PM**.

## Introduction

The goal of this lab is to strengthen your understanding of classifiers applied to a real world data set to achieve high performance. By the end, you'll demonstrate skills in data pre-preprocessing, model selection, and an approach to hyperparameter tuning. By completing the lab, you will demonstrate that you understand:

- how to preprocess a dataset
- how to apply a range of classification models
- how to find better hyperparameters

## Provided Files

- `Lab4.ipynb`
- `tic-tac-toe.data`
- `tic-tac-toe.names` which has more details about the data

Work through `Lab4.ipynb` with your partner(s). Then submit `Lab4.ipynb` with the cell outputs saved to Gradescope.