

# CSI4106 - Project Proposal – Group 22

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The topic of our project is image classification of people playing sports. This will be our group's first time working on image based machine learning. The problem our project will solve is assisting people who may not be familiar with a sport identify it via a picture.

There are several resources we will use to solve this problem. Our group will use TensorFlow to create and train our classification model. It will use a convolution neural network. We will train our model to recognize a variety of sports including sports like hockey, soccer, baseball, swimming and more. Training images can easily be found online such as these datasets from Kaggle [dataset1](#) and [dataset2](#). Various metrics will be assessed including accuracy, precision, recall, F1-score and more. We plan on visualizing the data with the Python library Matplotlib. We do not plan on using other literary sources or research for this project.

Member contributions:

- Colin - classification model development, gathering dataset, training model
- Ryan - classification model development and parameter tuning
- Will - classification model development and data visualization