This project’s goal is to do a binary classification of clean cells and cells infected with malaria. The problem we are attempting to solve is to make a model where someone can simply feed in an image of cell and the model will then determine if the cell is infected or not.

The value of this will derive from the ability to diagnose people from simple images of cells. Right now the current method of diagnosing malaria comes from looking at someone’s cells. This model if successful can allow this process to be automated and possibly make some medical professionals jobs a bit easier.

My data source is a link on Kaggle <https://www.kaggle.com/iarunava/cell-images-for-detecting-malaria>. This source can be accessed by simply following the link and downloading the folders of cell images.

I anticipate using a convolutional neural network for image classification, a confusion matrix to find metrics and judge the models.

Likely challenges will be making significantly different models as opposed to one neural network and simply tweaking a couple settings with no real direction. There are also about 27,000 images in the dataset so my hardware limitations may be a problem.