# CSC8635 - Structured Abstract

## Context

While there are many efficient machine learning models for identifying skin cancer, there are very few for identifying skin cancer within dermatoscopic images, which could be a breakthrough for the world of medicine if conquered.

## Objective

In my report a comparison was made between a custom-built convolutional neural network and a pre-defined neural network (VGG). This was important as there are not many comparisons of machine learning models currently, especially for dermatoscopic images.

## Method

A custom-built convolutional neural network and the VGG-16 convolutional neural network models were trained to identify skin cancer in dermatoscopic images and their performances compared.

## Results

VGG-16 was found to be slightly more accurate (0.72% more accuracy) and had slightly lower loss (0.0901 less loss) than the custom-built convolutional neural network.

## Novelty

No comparison has been made between machine learning models for dermatographic images as of the time of writing. I was also unable to find a comparison between custom built machine learning models and pre-defined machine learning models.

# CSC8635 – Key Images



