

**Privacy-preserving technique for Profile Pictures**

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A final year project report presented to the Nanyang Technological University

in partial fulfilment of the requirements of the degree of

Bachelor of Engineering

**2021**

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# ABSTRACT

Figure 1a shows the layers in the 3-layer neural network for a classification problem. It consists of a hidden-layer of 10 neurons with the ReLU activation function, and an output SoftMax layer. It has a weight decay parameter of 1e-6, and a learning rate of 0.01. I used an Adam optimiser for better results, and cross entropy for the loss function.

In order to find the optimal number of epochs where the test error begins to converge, I did a 5-fold cross-validation to repeat the training 5 times to cover all of the training data. I also included a call-

determined that a patience of 50 is optimal, and restore\_best\_weights is set to True in order to obtain the weights of the model with the lowest validation loss.

# ACKNOWLEDGEMENTS

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# 1. INTRODUCTION

## 1.1 Background

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# 2. LITERATURE REVIEW

## 2.1 NVIDIA

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Chart, bar chart

Description automatically generated

Figure 2A: Plot accuracies