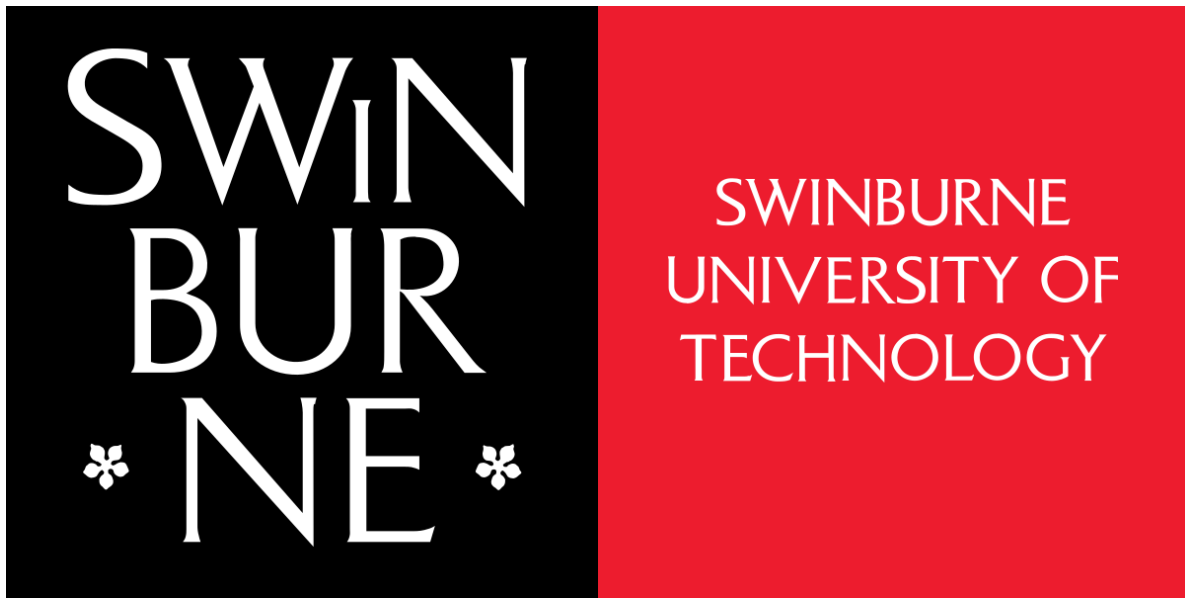**Course Name:** Artificial Intelligence for Engineering (COS40007)

Studio Session: Studio 1 - 7

Studio Tutor: Abyan Salam

SWINBURNE UNIVERSITY OF TECHNOLOGY

Title: Portfolio Assessment 4: "Deep Learning using Tensorflow and Keras"

Name: Ashraf Shahzad Toor

Student ID: 104586656

GitHub Code Link: https://github.com/AshrafToor/COS40007_AIE/tree/main/Assessment4

Submission Date: 13-04-2025

Test outcome of 20 images for CNN model (a table containing true class and predicted class and final overall accuracy)

Image #	True Class	Predicted Class
Image 1	rust	no rust
Image 2	rust	no rust
Image 3	rust	rust
Image 4	rust	no rust
Image 5	rust	rust
Image 6	rust	rust
Image 7	rust	rust
Image 8	rust	rust
Image 9	rust	rust
Image 10	rust	rust
Image 11	no rust	no rust
Image 12	no rust	no rust
Image 13	no rust	no rust
Image 14	no rust	no rust
Image 15	no rust	no rust
Image 16	no rust	no rust
Image 17	no rust	no rust
Image 18	no rust	rust
Image 19	no rust	rust
Image 20	no rust	rust

Overall Accuracy: 70%

Test outcome of 20 images for RestNet50 model (a table containing true class and predicted class and overall accuracy)

Image #	True Class	Predicted Class
Image 1	rust	no rust
Image 2	rust	rust
Image 3	rust	no rust
Image 4	rust	no rust
Image 5	rust	rust
Image 6	rust	no rust
Image 7	rust	no rust
Image 8	rust	rust
Image 9	rust	rust
Image 10	rust	rust
Image 11	no rust	no rust
Image 12	no rust	no rust

Image 13	no rust	rust
Image 14	no rust	rust
Image 15	no rust	rust
Image 16	no rust	rust
Image 17	no rust	rust
Image 18	no rust	no rust
Image 19	no rust	no rust
Image 20	no rust	no rust

Overall Accuracy: 50%