

## **Abstract**

With the increased usage of AI image generators, distinguishing between human-made and AI-generated images will become increasingly more difficult. The increased usage will also raise questions about ethics and misuse of Artificial Intelligence online. This research aims to use the application of Transfer Learning and Siamese Neural Networks (SNNs) to differentiate AI-generated images and human-made ones. The AI is trained and tested using an AI-Artbench Dataset, consisting of 100,000 images total, consisting of many different art styles. The performance of the detector was evaluated based on the accuracy and precision of the detector, with results showing an accuracy of around 86% and a precision of 87.7%, showing that the model is effective at detecting and differentiating AI images.

**Keywords: AI, Transfer Learning, Siamese Neural Networks, Image Classification**