Abstract

Person Re-Identification is a task in the field of computer vision that aims to re-identify the same individual across multiple images captured from different viewpoints or scenarios. In computer vision, person re-id presents a complex challenge due to the high visual variance between individual images taken from diverse perspectives and situations. This makes accurate re-identification difficult.

This research proposes the use of the Autoencoder method in person re-id. The Autoencoder method is considered a powerful tool in Deep Unsupervised Learning due to its ability to learn useful compressed representations and enhance input reconstruction. The selection of this method is based on its capability to reconstruct its own input using compressed or decompressed representations.

The Autoencoder learns a compressed representation from the input, and then attempts to reconstruct that input. The use of this compressed representation is intended to measure the similarity between different individuals in person re-id. By utilizing the Autoencoder, it is expected that the high visual variance in individual images can be overcome, and the accuracy of re-identification in person re-id can be improved.

This research aims to provide a better understanding of the use of Autoencoders in person re-id. The advantage of this method in addressing the challenge of re-identifying individuals in varied images is expected to be demonstrated. As a result, this research is expected to contribute to the development of more accurate and effective person re-id systems.

Keywords: *person re-id, autoencoder, computer vision, unsupervised learning.*