## Facial Expression Recognition using Compact Embeddings

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September 2022

## 1 Abstract

Automatic facial expression recognition is a computer vision activity where we classify a photo into discrete expressions or emotions. However expressions do not always classify into a specific class, for example there could be shy smile to laughter. So, we try to classify the image into a range of expressions using embeddings.

**Embeddings in Machine Learning:** An embedding is a low dimensional capture of high dimensional data. We use embedding techniques like Fourier descriptors to capture face structure and classify them. We plan to capture enough information about the picture to solve the problem at hand.