1135-00-3201   **Islam Faisal*** (`islamfm@aucegypt.edu`), **Andrew Nguyen** (`atn015@ucsd.edu`), **Surabhi Desai** (`sd207@st-andrews.ac.uk`), **Prem Talwai** (`pmt55@cornell.edu`) and **Shantanu Joshi** (`s.joshi@g.ucla.edu`). *Survey on Triplet Mining for Facial Recognition Convolutional Neural Networks.* Preliminary report.

A convolutional neural network can be used to map face images to a feature embedding space. This feature embedding space, equipped with a metric can be used to determine how similar two face images are, which in turn is used for recognition and verification tasks. Triplet loss is a loss function used to train convolutional neural networks for such tasks. A bottleneck for this optimization problem is selecting triplets good enough to result in fast convergence and high accuracy. In this talk, we survey different triplet mining techniques used in training convolutional neural networks for the task of facial recognition and verification. (Received September 27, 2017)