Abstract.

The new National Security Entry-Exit System requires that the fingerprints of hundreds of foreign visitors entering the US every day are matched against a database of known criminals and terrorists. An effective and reliable way of finding matching fingerprint is necessary to accomplish this task. We will look at a technique that is based on feature extraction and pattern matching. To match fingerprints properly, it is crucial to improve the quality of the digital image first. We apply bandpass filters to the Fourier representation of the image to remove noise.

All faculty and students are welcome.