CURRENT CHALLENGES IN FACE RECOGNITION

ABSTRACT

The problem of detecting and recognizing human faces in still images and video streams has been an active area of research over the last decade, as a subset of the more general field known as biometrics. Standard applications are visitor identification, surveillance and monitoring of secure facilities, biometric identification for automated teller machines, etc.

This seminar will be of an expository nature, and should be accessible to a general audience. The goal will be to introduce some of the main challenges in face recognition and highlight the intrinsic statistical difficulties associated with them, such as feature selection, dimensionality reduction, pattern classification in very high-dimensional spaces, and computational burden of nearest-neighbor searches in such spaces.

If there is enough interest among the graduate students, this talk will be extended into a graduate seminar during the spring semester.