

Collaborative face recognition using a network of smart cameras

Vinod Kulathumani
West Virginia University

Network of image sensors combined with biometric systems can form the building block for a variety of surveillance applications such as airport security, protection of critical infrastructures and restricted access to guarded assets. In relation to image sensor networks our work is focused on collaborative face recognition using a network of camera equipped PDAs. The goal of the project is real time, in-network extraction of biometric content for face recognition. We are investigating the feasibility of smart camera devices and hand held PDAs to assist in real time biometric analysis. Such systems have the advantage of being portable, being covert and also being scalable because of the lower costs involved. We are interested in understanding the coverage requirements and in designing efficient algorithms suitable for such limited resource devices.