

Toward Overt, Stand-off and Multimodal Biometrics

Biometrics have long been used to secure lives and investments. Most of the biometrics techniques are image-based and have their own merits and demerits offering a tradeoff among various factors such as ease of use, resilience, reliability and cost-effectiveness. Inspired by recent advances in technology such as high processing power and high resolution cameras, current research focuses on moving biometrics techniques from an overt mode to covert, touch-based or closeby capture to stand-off capture, and single-mode biometrics to multibiometrics. In this talk, an overview of advanced biometrics techniques is presented. We also present our research results on partial iris recognition to be employed in an covert and/or stand-off mode. We also address a multimodal biometrics technique obtained by fusing iris and retina images which gives a more reliable and accurate result than each of the unimodals mentioned above.