

Advanced Biometrics: Covert, Stand-off and Reliable

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 to stand-off capture-based, and single-mode 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 a covert 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.