Image and Vision Computing (IVC) Special Issue on: Biometrics in the Wild

Introduction

Biometric recognition from data captured in unconstrained settings, commonly referred to as *biometric recognition in the wild*, represents a challenging and highly active area of research. The interest in this area is fueled by the numerous application domains that deal with unconstrained data acquisition conditions such as forensics, surveillance, social media, consumer electronics or border control. While the existing biometric technology has matured to a point, where excellent performance can be achieved for various tasks in ideal laboratory-like settings, many problems related to *in-the-wild* scenarios still require further research and novel ideas. The goal of this special issue is to present the most advanced work related to biometric recognition in unconstrained settings and introduce novel solutions to open biometrics-related problems. Submitted papers should make a significant contribution in terms of theoretical findings or empirical observations, demonstrate improvements over the existing state-of-the-art and use the most challenging datasets available.

The special issue builds on the Biometrics-in-the-Wild (BWild) workshop series organized as part of IEEE FG 2015 and IEEE FG 2017. The special issue is open to all, but submissions from past BWild participants are especially welcome.

Topics of Interest

We invite original high-quality papers on topics related to biometric recognition in the wild, including, but not limited to:

- Region of interest detection (alignment, landmarking) in the wild,
- Soft biometrics in the wild,
- Context-aware techniques for biometric detection and recognition,
- Novel normalization techniques,
- Multi-modal biometrics in the wild,
- Biometric recognition in the wild,
- Biometrics from facial behavior (e.g., eye movement, facial expressions, micro-expressions),
- Biometrics based on facial dynamics,
- Novel databases and performance benchmarks,
- Ethical issues, privacy protection and de-identification,
- Spoofing and countermeasures,
- Deep learning approaches for unconstrained biometric recognition,
- Related applications, especially mobile.

Important Dates

Submission deadline: 30 June, 2017
Target publication date: First half of 2018

Guest Editors

Bir Bhanu, University of California, Riverside, United States
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