Patent Specification

confidential

Title of the Invention

Methods and Apparatus for Person Identification and Person Re-Identification with full or partially available parts in a structured feature set

Abstract

The present invention relates to the field of Person Identification and Person Re-Identification from same or different camera views. Specifically, the present invention makes use of multiple features of a person including face features, ear features, features from head and other body parts, from coarse to fine-grained feature, from global to local features to improve the robustness and efficacy of the person recognition or person re-identification no matter how a person's view to be seen and captured from a camera, or how a person's part is occluded from the real captured scene.

Not only can it be applied to generic Person Re-Identification, but also applied to a finer level which consists of face or body parts (e.g. limbs, torsos, heads). This technique can be used to describe a person in a structure way. The invention makes person search easier with the said structured multiple features of a person even in the case of occlusion case where certain part of person body is missing. Furthermore unique features of a person like face features, ear features can be highly considered with higher weights for re-identifying as the same person whenever such features are available.