

# A Novel Method for an Individual Recognition Using 3D Gait Signatures.

**Source:** International Journal of Advancements in Computing Technology . Mar2014, Vol. 6 Issue 2, p74-83. 10p.

**Author(s):** Chutisant Kerdvibulvech; Koichiro Yamauchi

## **Abstract:**

In this paper, we propose a new method for an individual recognition using 3D gait signatures computed from 3D data that are obtained from a triangulation-based projector-camera system. The method consists of four steps: First, 3D human body data are acquired by using a projector-camera system. The body data are composed of representative poses that occur during the gait cycle of a walking human. Second, 3D human body model is fitted to the body data using a bottom-up approach to estimate its pose. Third, the entire gait sequence is recovered by interpolation of joint positions in the fitted body models. Finally, static and dynamic gait features are obtained which are used for individual recognition. Representative experimental results have been included to show the robustness of the system.

Copyright of International Journal of Advancements in Computing Technology is the property of Advanced Institute of Convergence Information Technology and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use. This abstract may be abridged. No warranty is given about the accuracy of the copy. Users should refer to the original published version of the material for the full abstract.

For access to this entire article and additional high quality information, please check with your college/university library, local public library, or affiliated institution.



**Important User Information:** Remote access to EBSCO's databases is permitted to patrons of subscribing institutions accessing from remote locations for personal, non-commercial use. However, remote access to EBSCO's databases from non-subscribing institutions is not allowed if the purpose of the use is for commercial gain through cost reduction or avoidance for a non-subscribing institution.

[Privacy Policy](#) | [Terms of Use](#) | [Copyright](#)

© 2015 EBSCO Industries, Inc. All rights reserved.