## Accepted Manuscript

A Computer Vision Based Method for 3D Posture Estimation of Symmetrical Lifting

Rahil Mehrizi, Xi Peng, Xu Xu, Shaoting Zhang, Dimitris Metaxas, Kang Li

PII:	S0021-9290(18)30027-7
DOI:	https://doi.org/10.1016/j.jbiomech.2018.01.012
Reference:	BM 8528
To appear in:	Journal of Biomechanics
Accepted Date:	8 January 2018



Please cite this article as: R. Mehrizi, X. Peng, X. Xu, S. Zhang, D. Metaxas, K. Li, A Computer Vision Based Method for 3D Posture Estimation of Symmetrical Lifting, *Journal of Biomechanics* (2018), doi: https://doi.org/10.1016/j.jbiomech.2018.01.012

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## ACCEPTED MANUSCRIPT

## A Computer Vision Based Method for 3D Posture Estimation of Symmetrical Lifting

Rahil Mehrizi<sup>1</sup>, Xi Peng<sup>2</sup>, Xu Xu <sup>5</sup>, Shaoting Zhang<sup>6</sup>, Dimitris Metaxas<sup>2</sup>, Kang Li<sup>1,2,3,4</sup>

<sup>1</sup>Department of Industrial & Systems Engineering, <sup>2</sup>Department of Computer Science, <sup>3</sup>Department of Biomedical Engineering, Rutgers University, Piscataway, New Jersey
<sup>4</sup>Department of Orthopaedics, Rutgers New Jersey Medical School, Newark, New Jersey
<sup>5</sup> Edward P. Fitts Department of Industrial and Systems Engineering, North Carolina State University, Raleigh, North Carolina

<sup>6</sup>Department of Computer Science, University of North Carolina, Charlotte, North Carolina

*Keywords*: computer vision, marker-less motion capture, joint kinematics assessment, lifting, discriminative approach

\*Corresponding author. Tel.: +1-848-445-8787; fax: +1-732-445-5467

E-mail address: kl419@soe.rutgers.edu (K. Li)

Word count: 3080

Download English Version:

## https://daneshyari.com/en/article/7236585

Download Persian Version:

https://daneshyari.com/article/7236585

Daneshyari.com