

Accepted Manuscript

Title: Target Registration Error Minimization for Minimally Invasive Interventions

Author: Sylwester Fabian Dominik Spinczyk

PII: S0895-6111(17)30008-3

DOI: <http://dx.doi.org/doi:10.1016/j.compmedimag.2017.01.008>

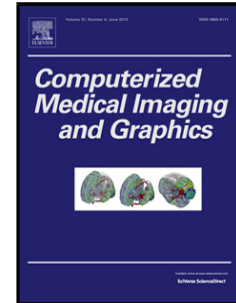
Reference: CMIG 1494

To appear in: *Computerized Medical Imaging and Graphics*

Received date: 1-12-2016

Revised date: 23-1-2017

Accepted date: 31-1-2017



Please cite this article as: Fabian S, Spinczyk D, Target Registration Error Minimization for Minimally Invasive Interventions, *Computerized Medical Imaging and Graphics* (2017), <http://dx.doi.org/10.1016/j.compmedimag.2017.01.008>

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.

Target Registration Error Minimization for Minimally Invasive Interventions

Sylwester Fabian, Dominik Spinczyk*

Silesian University of Technology, Faculty of Biomedical Engineering, 40 Roosevelta, 41-800
Zabrze, Poland

*Corresponding author

Email: dspinczyk@polsl.pl (DS)

Highlights

Minimization of Target Registration Error for minimally invasive intervention was achieved.
Usability of thin template splines to minimize Target Registration Error was presented.
Semi-automatic real time method was implemented, which integrate specially designed marker.

List of abbreviations

FLE – fiducial localization error

FRE – fiducial registration error

H_0 – null hypothesis

H_1 – alternative hypothesis

$t_{\text{arg } et_{\text{estim}}}$ – the estimated position of the target point

$t_{\text{arg } et_{\text{real}}}$ – the real position of the target point

TRE – target registration error

TRE_{estim} – value of TRE estimator

TRE_{real_TPS} – measured value of TRE using the deformation field based on thin-plate spline

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات