

Accepted Manuscript

Gaze Gesture Based Human Robot Interaction for Laparoscopic Surgery

Kenko Fujii, Gauthier Gras, Antonino Salerno, Guang-Zhong Yang

PII: S1361-8415(17)30180-9
DOI: [10.1016/j.media.2017.11.011](https://doi.org/10.1016/j.media.2017.11.011)
Reference: MEDIMA 1318



To appear in: *Medical Image Analysis*

Received date: 12 December 2016
Revised date: 22 November 2017
Accepted date: 23 November 2017

Please cite this article as: Kenko Fujii, Gauthier Gras, Antonino Salerno, Guang-Zhong Yang, Gaze Gesture Based Human Robot Interaction for Laparoscopic Surgery, *Medical Image Analysis* (2017), doi: [10.1016/j.media.2017.11.011](https://doi.org/10.1016/j.media.2017.11.011)

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.

Highlights

- A gaze contingent robotic laparoscope is presented.
- Bimanual tasks can be performed without the need for a camera assistant.
- Learned gaze gestures are used to control zooming, panning, and tilting.
- An online gaze calibration method is used to maintain gaze tracking accuracy.
- Comprehensive studies show significant improvements over using an assistant.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/6877971>

Download Persian Version:

<https://daneshyari.com/article/6877971>

[Daneshyari.com](https://daneshyari.com)