Analysis and recognition of a surgeon's motions in laparoscopic cholecystectomy giving a scrub nurse robot suitable timings for instrument exchange [Electronic resource]

Ohnuma, K.; Nasamune, K.; Yoshimitsu, Kitaro; **Vain, Jüri**; Fukui, Y.; Miyawaki, F. Proceedings of the 3rd COE Workshop on Human Adaptive Mechatronics (HAM): 3-4 March 2006, Tokyo Denki University, Japan 2006 / [5] p. [CD-ROM]

Hybrid approach to detection of the surgeon's hand motions during endoscope surgery

Nõmm, Sven; **Vain, Jüri**; **Petlenkov, Eduard**; Miyawaki, Fujio; Yoshimitsu, Kitaro ICIEA: 4th IEEE Conference on Industrial Electronics and Applications: Xi'an, 25-27 May 2009 2009 / p. 3488-3492 https://ieeexplore.ieee.org/abstract/document/5138854

Recognition of the surgeon's motions during endoscopic operation by statistics based algorithm and neural networks based ANARX models

Nõmm, Sven; **Petlenkov, Eduard**; **Vain, Jüri**; Belikov, Juri; Miyawaki, Fujio; Yoshimitsu, Kitaro Proceedings of the 17th World Congress The International Federation of Automatic Control: Seoul, Korea, July 6-11, 2008 2008 / p. 14773-14778

Restricted connectivity neural network structure for organ recognition by analysis of endoscopic images during surgical operation

Petlenkov, Eduard; **Artemtšuk, Igor**; Miyawaki, F.; Yoshimitsu, Kitaro BEC 2008 : 2008 International Biennial Baltic Electronics Conference : proceedings of the 11th Biennial Baltic Electronics Conference : Tallinn University of Technology : October 6-8, 2008, Tallinn, Estonia 2008 / p. 261-264 : ill

Scrub nurse robot system - intraoperative motion analysis of a scrub nurse and timed-automata-based model for surgery Miyawaki, Fujio; Masamune, Ken; Suzuki, Satoshi; Yoshimitsu, Kitaro; **Vain, Jüri** IEEE transactions on industrial electronics 2005 / 5, p. 1227-1235 : ill https://ieeexplore.ieee.org/abstract/document/1512454