

Stanford



Hossein Mohamadipanah

Research Engineer, Surgery - General Surgery

Bio

BIO

Dr. Hossein Mohamadipanah joined Stanford in March 2018 and his work focuses on data analysis and machine learning in surgical education.

CURRENT ROLE AT STANFORD

Senior Researcher

EDUCATION AND CERTIFICATIONS

- Postdoctoral, University of Wisconsin Madison , Data Analysis and Machine Learning (2017)
- Postdoctoral, Oklahoma State University , Machine Learning (2015)
- PhD in Mechanical Engineering, Oklahoma State University , Medical Robotics, Machine Learning, and Computer Vision (2014)
- MSc in Mechanical Engineering, Sharif University of Technology , Robotics (2010)

Professional

PROFESSIONAL INTERESTS

Robotics, Machine Learning, Computer Vision, Manipulator Design.

WORK EXPERIENCE

- Instructor - Oklahoma State University (June 1, 2015 - July 31, 2015)

Publications

PUBLICATIONS

- **Dynamic Visual Feedback During Junctional Tourniquet Training.** *The Journal of surgical research*
Xu, J., Kwan, C., Sunkara, A., Mohamadipanah, H., Bell, K., Tizale, M., Pugh, C. M.
2019; 233: 444–52
- **Combining metrics from clinical simulators and sensorimotor tasks can reveal the training background of surgeons.** *IEEE transactions on bio-medical engineering*
Huang, F. C., Mohamadipanah, H., Mussa-Ivaldi, F., Pugh, C.
2019
- **Shortcut assessment: Can residents' operative performance be determined in the first five minutes of an operative task?** *Surgery*
Mohamadipanah, H., Nathwani, J., Peterson, K., Forsyth, K., Maulson, L., DiMarco, S., Pugh, C.
2018; 163 (6): 1207–12

- **Residents' response to bleeding during a simulated robotic surgery task** *JOURNAL OF SURGICAL RESEARCH*
Walker, J. L., Nathwani, J. N., Mohamadipanah, H., Laufer, S., Jocewicz, F. F., Gwillim, E., Pugh, C. M.
2017; 220: 385–90
- **Residents' surgical performance during the laboratory years: an analysis of rule-based errors** *JOURNAL OF SURGICAL RESEARCH*
Nathwani, J. N., Wise, B. J., Garren, M. E., Mohamadipanah, H., Van Beek, N., DiMarco, S. M., Pugh, C. M.
2017; 219: 226–31
- **Robust Automatic Feature Tracking on Beating Human Hearts for Minimally Invasive CABG Surgery** *JOURNAL OF MEDICAL DEVICES-TRANSACTIONS OF THE ASME*
Mohamadipanah, H., Andalibi, M., Hoberock, L.
2016; 10 (4)
- **Can a virtual reality assessment of fine motor skill predict successful central line insertion?** *AMERICAN JOURNAL OF SURGERY*
Mohamadipanah, H., Parthiban, C., Nathwani, J., Rutherford, D., DiMarco, S., Pugh, C.
2016; 212 (4): 573-+
- **Predictive Model Reference Adaptive Controller to Compensate Heart Motion in Minimally Invasive CABG Surgery** *CARDIOVASCULAR ENGINEERING AND TECHNOLOGY*
Mohamadipanah, H., Hoberock, L. L., Andalibi, M.
2015; 6 (3): 329–39
- **Effects of texture addition on optical flow performance in images with poor texture** *IMAGE AND VISION COMPUTING*
Andalibi, M., Hoberock, L. L., Mohamadipanah, H.
2015; 40: 1–15