



Mohammad Salehizadeh

Postdoctoral Scholar, Cardiothoracic Surgery

Bio

HONORS AND AWARDS

- 2025–26 Biodesign Spectrum HealthTech Pilot Grant— Finalist, Stanford University (Summer 2025)
- Visiting Scientist, Johns Hopkins University, USA (November 2024-May 2025)
- ISHLT Travel Award, The International Society for Heart and Lung Transplantation (April 2026)
- Canadian NSERC Postdoctoral Fellowship (PDF), Conducted at Johns Hopkins University under Supervision of Dr. Russell H. Taylor, USA (2022-2024)
- Morey Speigel Memorial Prize, University of Toronto (2019)
- IEEE ICRA 2018 RAS Travel Grant, IEEE (2018)
- Canadian NSERC Postgraduate Scholarship-Doctoral (PGS-D), Tenured at the University of Toronto (2017-2019)
- Best Student Paper Award, International MARSS2017 conference (2017)
- Weber and Mariano Graduate Scholarship, University of Toronto (2017)
- Barbara and Frank Milligan Graduate Fellowship, University of Toronto (2016)

STANFORD ADVISORS

- Y Joseph Woo, Postdoctoral Faculty Sponsor

PATENTS

- Emad M. Boctor, Yixuan Wu, Jeeun Kang, Keshuai Xu, Hyunwoo Song, Russell H. Taylor, Yuxin Chen, Yifan Yin, Joseph Webster Stayman, Mohammad Salehizadeh. "United States Patent WO2025054354A1 Combined ultrasound and mammography system for breast imaging", Johns Hopkins University, Sep 5, 2023

Publications

PUBLICATIONS

- **AI-powered ultrasound imaging assessment of donor hearts during ex vivo perfusion** *The International Symposium on Heart and Lung Transplantation (ISHLT)*
Salehizadeh, M., Shroff, N., Huynh, C., Mcleod, J., Guenthart, B., Currie, M.
2026
- **Monocular Vision-Based Endoscopic Sinus Navigation: A SLAM Driven Approach With CT Integration.** *Healthcare technology letters*
Soberanis-Mukul, R. D., Chan, C. H., Chou, R., Mangulabnan, J. E., Seenivasan, L., Chen, X., Salehizadeh, M., Vedula, S. S., Taylor, R. H., Ishii, M., Hager, G., Unberath, M.
2025; 12 (1): e70046
- **Admittance Switching for Stability and Transparency in Human-Robot Collaborative Microsurgery** *IEEE ROBOTICS AND AUTOMATION LETTERS*

- Banks, B., Salehizadeh, M., Munawar, A., Taylor, R. H., Tumerdem, U.
2024; 9 (2): 1891-1898
- **Dynamic Modeling and Identification of a Robotic Intracardiac Echo Catheter**
Salehizadeh, M., Pedrosa, F., Bassan, H., Patel, R., Jagadeesan, J., IEEE
IEEE.2023: 4668-4674
 - **Path Planning and Tracking for an Underactuated Two-Microrobot System** *IEEE ROBOTICS AND AUTOMATION LETTERS*
Salehizadeh, M., Diller, E. D.
2021; 6 (2): 2674-2681
 - **Compensating deep focusing distortion for femtosecond laser inscription of low-loss optical waveguides** *OPTICS LETTERS*
Alimohammadian, E., Liu, S., Salehizadeh, M., Li, J., Herman, P.
2020; 45 (22): 6306-6309
 - **Three-dimensional independent control of multiple magnetic microrobots via inter-agent forces** *INTERNATIONAL JOURNAL OF ROBOTICS RESEARCH*
Salehizadeh, M., Diller, E.
2020; 39 (12): 1377-1396
 - **Millimeter-scale flexible robots with programmable three-dimensional magnetization and motions** *SCIENCE ROBOTICS*
Xu, T., Zhang, J., Salehizadeh, M., Onaizah, O., Diller, E.
2019; 4 (29)
 - **Independent Position Control of Two Magnetic Microrobots via Rotating Magnetic Field in Two Dimensions**
Salehizadeh, M., Li, Z., Diller, E.
edited by Haliyo, S., Sill, A., Zhou, Q., Kallio, P., Fatikow, S.
IEEE.2019
 - **Parallel Pick and Place Using Two Independent Untethered Mobile Magnetic Microgrippers**
Zhang, J., Salehizadeh, M., Diller, E., IEEE
IEEE COMPUTER SOC.2018: 123-128
 - **3D shape evolution of microparticles and 3D enabled applications using non-uniform UV flow lithography (NUFL)** *SOFT MATTER*
Choi, K., Salehizadeh, M., Da Silva, R., Hakimi, N., Diller, E., Hwang, D.
2017; 13 (40): 7255-7263
 - **Two-agent formation control of magnetic microrobots in two dimensions** *JOURNAL OF MICRO-BIO ROBOTICS*
Salehizadeh, M., Diller, E.
2017; 12 (1-4): 9-19
 - **Two-Agent Formation Control of Magnetic Microrobots**
Salehizadeh, M., Diller, E.
edited by Haliyo, S., Sill, A., Regnier, S., Fatikow, S.
IEEE.2016
 - **Laser Cavity Squeezing using Optimal Servo Controller in Optomechanical Sensors**
Salehizadeh, M., Habibi, J., Aghdam, A. G., Kabir, M. Z., IEEE
IEEE COMPUTER SOC.2012: 5843-5848
 - **Size Distribution Estimation of Stone Fragments via Digital Image Processing**
Salehizadeh, M., Sadeghi, M. T., Hussain, M., KarHan, T., Crawfis, R., Thalmann, D., Kao, D., Avila, L.
edited by Bebis, G., Boyle, R., Parvin, B., Koracin, D., Chung, R., Hammound, R.
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