



Seyed Hossein Mirjahanmardi

Postdoctoral Scholar, Radiation Physics

Bio

BIO

Seyed Hossein Mirjahanmardi currently serves as a postdoctoral fellow in Medical Physics at Stanford University. He earned his Ph.D. with honors in electrical and computer engineering from the University of Waterloo, Canada, in 2020. Dr. Mirjahanmardi is a senior member of IEEE and has been honored with the Natural Sciences and Engineering Research Council of Canada (NSERC) fellowship award. His expertise and industry experience extend from Electromagnetics and RF design to Computational Pathology and High-dimensional Data Analysis, primarily focusing on Artificial Intelligence (AI) algorithms. His focus is inventing technologies in AI, computational pathology, and Electromagnetics for healthcare applications. His PhD research and current works at Stanford have been highlighted widely in the news.

HONORS AND AWARDS

- NSERC PDF Award, Natural Sciences and Engineering Research Council of Canada (2023)
- Research Seed Grant, School of Medicine, Stanford University (2023)
- IEEE Senior Member, IEEE (2022)
- First Place Award at 3MT Presentation, YouTube Link: https://www.youtube.com/watch?v=axlBCf56_AM, University of Waterloo (2018)
- Ontario PhD Nomination Award, Ontario (2020)
- Outstanding Teaching Sandford Fleming Award, University of Waterloo (2019)
- 3MT Finalist, University of Waterloo (2018)
- Best Teaching Assistant Award, University of Waterloo (2018)
- Best Thesis Presentation Award, University of Waterloo (2018)
- Best Student Award, University of Waterloo (2017)
- Best Student Award, University of Waterloo (2016)
- Best Student Award, Amirkabir University of Technology (2014)

PROFESSIONAL EDUCATION

- Bachelor of Science, University Of Shiraz (2012)
- Master of Science, Amirkabir University of Technology (2014)
- Doctor of Philosophy, University of Waterloo (2020)
- Ph.D., University of Waterloo , Electrical and Computer Engineering (2020)

STANFORD ADVISORS

- Ruijiang Li, Postdoctoral Faculty Sponsor

PATENTS

- Seyed Hossein Mirjahanmardi, Yuming Jiang, Ruijiang Li. "United States Patent 63504621 Automated Cell Classification on Histopathology Images without Human Annotations", Leland Stanford Junior University, Jun 8, 2023
- Seyed Hossein Mirjahanmardi, Omar Ramahi. "United States Patent 62909218 Computerized Tomography with Microwaves", Oct 1, 2019

LINKS

- Google Scholar: <https://scholar.google.com/citations?user=joQ-ui0AAAAAJ&hl=en>
- LinkedIn: <https://www.linkedin.com/mwllite/in/shmirjah>

Publications

PUBLICATIONS

- **Ki67 Proliferation Index Quantification Using Silver Standard Masks**
Mirjahanmardi, S., Dawe, M., Fyles, A., Shi, W., Androutsos, D., Liu, F., Done, S., Khademi, A., Tomaszewski, J. E., Ward, A. D.
SPIE-INT SOC OPTICAL ENGINEERING.2023
- **Computerized Tomography With Low-Frequency Electromagnetic Radiation** *International Microwave and Antenna Symposium (IMAS)*
Mirjahanmardi, S., Ba raeen, S. M., Akbari-Chelaresi, H., Nayyeri, V., Ramahi, O.
2023
- **Deep Feature Learning for Microwave Mammography With Convolutional Autoencoders** *IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting*
Mirjahanmardi, S., Akbari Chelaresi, H., Sali, R., Ramahi, O.
2023
- **Computerized Tomography with Radon Transform using Microwaves and Electrostatics** *IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting*
Ramahi, O., Ba Raeen, S., Akbari-Chelaresi, H., Mirjahanmardi, S., Nayyeri, V.
2023
- **Low-Dispersive Permittivity Measurement Based on Transmitted Power Only** *IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting*
Mirjahanmardi, S., Ramahi, O.
2023
- **Toward Computerized Tomography With Microwaves** *IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES*
Mirjahanmardi, S., Ramahi, O. M.
2022
- **Ki67 proliferation index quantification using silver standard masks** *SPIE Medical Imaging*
Mirjahanmardi, S., Dawe, M., Fyles, A., Shi, W., Androutsos, D., Liu, F., Done, S., Khademi, A.
2022
- **Preserving Dense Features for Ki67 Nuclei Detection**
Mirjahanmardi, S., Dawe, M., Fyles, A., Shi, W., Liu, F., Done, S., Khademi, A., Tomaszewski, J. E., Ward, A. D., Levenson, R. M.
SPIE-INT SOC OPTICAL ENGINEERING.2022
- **Computerized Tomography with Radon Transform using Microwaves and Electrostatics** *IEEE International RF and Microwave Conference (RFM)*
Ramahi, O., Ba Raeen, S., Akbari-Chelaresi, H., Mirjahanmardi, S., Nayyeri, V.
2022
- **Permittivity Characterization of Dispersive Materials Using Power Measurements** *IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT*
Mosavirik, T., Soleimani, M., Nayyeri, V., Mirjahanmardi, S., Ramahi, O. M.
2021; 70
- **Permittivity Reconstruction of Nondispersive Materials Using Transmitted Power at Microwave Frequencies** *IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT*

Mirjahanmardi, S., Albishi, A. M., Ramahi, O. M.

2020; 69 (10): 8270-8278

- **Intelligent Sensing Using Multiple Sensors for Material Characterization** *SENSORS*

Albishi, A. M., Mirjahanmardi, S. H., Ali, A. M., Nayyeri, V., Wasly, S. M., Ramahi, O. M.

2019; 19 (21)

- **Highly Accurate Liquid Permittivity Measurement using Coaxial Lines**

Mirjahanmardi, S., Ramahi, O., IEEE

IEEE.2019: 101-102

- **Forward Scattering from a Three Dimensional Layered Media with Rough Interfaces and Buried Object(s) by FDTD** *APPLIED COMPUTATIONAL ELECTROMAGNETICS SOCIETY JOURNAL*

Mirjahanmardi, S. H., Dehkhoda, P., Tavakoli, A.

2017; 32 (11): 1020-1028

- **Electromagnetic Scattering from a Buried Sphere in a Two-Layered Rough Ground**

Mirjahanmardi, S. H., Tavakoli, A., Zamani, H., Dehkhoda, P., IEEE

IEEE.2015: 506-507

PRESENTATIONS

- Microwave Imaging - University of Waterloo