

Marzieh Esmaeili

Contact Information	<i>Address:</i> Tehran, Iran <i>Cell Phone:</i> (+98) 915 512 9833 <i>E-mail:</i> marzieh.esmaeili@gmail.com	
Education	Tehran University of Medical Sciences , Tehran, Iran <i>Doctor of Philosophy</i> <ul style="list-style-type: none">• Medical Informatics, GPA: 19.11/20 (Top student)• Thesis title: Design and development an anomaly detection model in medical images by generative adversarial networks<ul style="list-style-type: none">◦ Supervisors: Dr. Marjan Ghazisaeedi, Dr. Mohammad Sabokrou◦ Advisors: Dr. Arman Rahmim, Dr. Vahid Changizi, Dr. Arash Roshanpoor Amirkabir University of Technology (Tehran Polytechnic) , Tehran, Iran <i>Master of Science</i> <ul style="list-style-type: none">• Information Technology Engineering – Information Security, GPA: 15.54/20• Thesis title: Anomaly detection using transaction relationships in databases<ul style="list-style-type: none">◦ Supervisors: Dr. Hamidreza Shahrriari, Dr. Babak Sadeghiyan Islamic Azad University of Mashhad , Mashhad, Iran <i>Bachelor of Science</i> <ul style="list-style-type: none">• Computer Engineering - Software, GPA: 16.72/20	Oct. 2017 to May. 2023 Sep. 2009 to Feb. 2012 Sep. 2002 to Feb. 2006
Research Interests	<ul style="list-style-type: none">• Machine Learning• Deep Learning• Medical Image Processing• Computer Vision	
Publications Journal papers	<ol style="list-style-type: none">1. Esmaeili, M., Toosi. A., Roshanpoor, A., Changizi, V., Ghazisaeedi, M., Rahmim, A., M., Sabokrou, "Generative adversarial networks for anomaly detection in biomedical imaging: A study on seven medical image datasets", IEEE Access, Vol. 11, 2023, P.P. 17906-17921. (IF: 3.9/Q1)2. Ahmadinejad, N., Ayyoubzadeh, SM., Zeinalkhani, F., Delazar, S., Javanmard, Z., Ahmadinejad, Z., Mohajeri, A., Esmaeili, M., "Discovering associations between radiological features and COVID-19 patients' deterioration", Health Science Reports, Vol. 6, Issue. 5, 2023, P.P. e1257. (ESCI/Q2/PubMed)3. Rabiei, R., Ayyoubzadeh, SM., Sohrabei, S., Esmaeili, M., Atashi, A., "Prediction of breast cancer using machine learning approaches", Journal of Biomedical Physics and Engineering, Vol. 12, Issue. 3, 2022, P.P. 297-308. (Q3/PubMed)4. Esmaeili, M., Ayyoubzadeh, SM., Javanmard, Z., Rostam Niakan Kalhori, S., "A systematic review of decision aids for mammography screening: Focus on outcomes and characteristics", International Journal of Medical Informatics, Vol. 149, 2021, P.P. 104406. (IF: 4.9/Q1/PubMed)5. Esmaeili, M., Abdi, F., Shafiee, G., Asayesh, H., Esmaeili Abdar, Z., Baygi, F., Qorbani, M., "Olfactory and gustatory dysfunction in 2019 novel coronavirus: An updated systematic review and meta-analysis", International Journal of Preventive Medicine, Vol. 12, Issue. 12, 2021, P.P. 170. (ESCI/Q3/PubMed)	

6. Mardi, P., **Esmaeili, M.**, Iravani, P., Abdar, ME., Pourrostami, K., Qorbani, M., “Characteristics of children with Kawasaki Disease-like signs in COVID-19 pandemic: A systematic review”, *Frontiers in Pediatrics*, Vol. 9, 2021, P.P. 147. (IF: 2.6/Q1/PubMed)
7. Vizheh, M., Qorbani, M., Arzaghi, SM., Muhidin, S., Javanmard, Z., **Esmaeili, M.**, “The mental health of healthcare workers in the COVID-19 pandemic: A systematic review”, *Journal of Diabetes & Metabolic Disorders*, Vol. 19, Issue. 2, 2020, P.P. 1967–1978. (IF:2.8/Q2/PubMed)
8. Baniasadi, T., Ghazisaeedi, M., Hassaniazad, M., Rostam Niakan Kalhori, S., Shahi, M., **Esmaeili, M.**, “Surgical patients follow-up by smartphone-based applications: A systematic literature review”, *Studies in health technology and informatics*, Vol. 271, 2020, P.P. 85-92. (Q3/PubMed)
9. **Esmaeili, M.**, Ayyoubzadeh, SM., Ahmadinejad, N., Ghazisaeedi, M., Nahvijou, A., Maghooli, K., “A decision support system for mammography reports interpretation”, *Health Information Science and Systems*, Vol. 8, Issue. 1, 2020, P.P. 1-8. (IF: 6.0/Q1/PubMed)
10. Ayyoubzadeh, SM., Rostam Niakan Kalhori, S., Shirkhoda, M., Mohammadzadeh, N., **Esmaeili, M.**, “Supporting colorectal cancer survivors using eHealth: A systematic review and framework suggestion”, *Supportive Care in Cancer*, Vol. 28, Issue. 8, 2020, P.P. 3543–3555. (IF: 3.1/Q2/PubMed)

Honors and Awards	Top Student Award , Department of Health Information Management, Tehran University of Medical Sciences, Tehran, Iran	2019
	<ul style="list-style-type: none"> • Ranked 1st among all PhD students in Medical Informatics (Class of 2021) 	
	National PhD Entrance Examination , Medical Informatics, Iran	2017
	<ul style="list-style-type: none"> • Ranked 1st among all participants (Written Exam) • Ranked 5th among all participants (Overall) 	
	Acknowledgment of Cooperation , Department of Computer Engineering, Quchan University of Technology, Quchan, Iran	2015
	Acknowledgment of Cooperation , CERT of Ferdowsi University of Mashhad, Mashhad, Iran	2013
	Research grant for MSc thesis , Iran Telecommunication Research Center (ITRC), Tehran, Iran	2012
	<ul style="list-style-type: none"> • Anomaly detection in databases using transaction dependencies 	
	National MSc Entrance Examination , Information Technology Engineering, Iran	2009
	<ul style="list-style-type: none"> • Ranked 32^{ed} among all participants 	

Teaching Experience	Tehran University of Medical Sciences , Tehran, Iran	2017 to 2018
	<ul style="list-style-type: none"> • <i>Lecturer</i> ○ Skill Laboratory – <i>Network security</i> (12 hours) 	Fall 2017
	Quchan University of Technology , Quchan, Iran	2014 to 2016
	<ul style="list-style-type: none"> • <i>Lecturer</i> ○ Computer Networks – Basic ○ Computer Networks – Advanced ○ Internet Engineering 	
	Bahar Institute of Higher education , Mashhad, Iran	2012 to 2015
	<ul style="list-style-type: none"> • <i>Lecturer</i> ○ Information Security ○ Network Security 	

	CERT of Ferdowsi University of Mashhad, Mashhad, Iran - (APA Lab)	Summer 2014
	<ul style="list-style-type: none"> • <i>Lecturer</i> <ul style="list-style-type: none"> ◦ .NET Based Web Application Security (20 hours) 	
	Tarbiat Modares University, Tehran, Iran	2013 to 2014
	<ul style="list-style-type: none"> • <i>Teaching Assistant</i> <ul style="list-style-type: none"> ◦ Security Protocols (Graduate Course) 	
	3rd International eConference on Computer and Knowledge Engineering, Ferdowsi University of Mashhad, Mashhad, Iran	Fall 2013
	<ul style="list-style-type: none"> • <i>Lecturer (Workshop)</i> <ul style="list-style-type: none"> ◦ Electronic Payment Systems (4 hours) 	
	Ferdowsi University of Mashhad, Mashhad, Iran	2012 to 2013
	<ul style="list-style-type: none"> • <i>Teaching Assistant</i> <ul style="list-style-type: none"> ◦ Security Protocols (Graduate Course) 	
Research Experience	Scientific Reviewer	2020 to present
	<ul style="list-style-type: none"> • <i>Journal of Diabetes & Metabolic Disorders</i> • <i>Epidemiology & Infection Journal</i> • <i>PeerJ Journal</i> • <i>International Quarterly of Community Health Education</i> • <i>Psychology Research and Behavior Management</i> • <i>Journal of Multidisciplinary Healthcare</i> • <i>International Journal of Psychiatry in Clinical Practice</i> • <i>International Journal of Mental Health Promotion</i> • <i>International Journal of Mental Health</i> • <i>International Journal of Occupational Safety and Ergonomics</i> 	
	Tehran University of Medical Sciences, Tehran, Iran	2020 to 2023
	<ul style="list-style-type: none"> • <i>PhD Dissertation</i> <ul style="list-style-type: none"> ◦ Design and development an anomaly detection model in medical images by generative adversarial networks • <i>Research Advisor</i> <ul style="list-style-type: none"> ◦ Design and development of an educational package on human papillomavirus infection ◦ Design and development of an educational package on the Iranian health insurance system 	
	Iranian Registry for Infants, Children and Adolescents with Chronic Kidney disease (CKD)	2019 to 2022
	<ul style="list-style-type: none"> • <i>Technical Consultant</i> 	
	Quchan University of Technology, Quchan, Iran	
	<ul style="list-style-type: none"> • <i>Research Advisor</i> <ul style="list-style-type: none"> ◦ Identify and classify peer-to-peer network traffic using machine learning techniques ◦ Design and development of a mobile based student service system 	2015 to 2016
	CERT of Ferdowsi University of Mashhad (APA Lab)	2014
	<ul style="list-style-type: none"> • <i>Research Supervisor</i> <ul style="list-style-type: none"> ◦ Social bots project 	

- Design and development of a web-based application vulnerability scanner tool

3rd International eConference on Computer and Knowledge Engineering Fall 2013

- *Scientific reviewing of papers*

Ferdowsi University of Mashhad, Mashhad, Iran 2013

- *Research Advisor*
 - Internet of Things Project

Amirkabir University of Technology (Tehran Polytechnic), Tehran, Iran 2012

- *Master Thesis*
 - Anomaly detection using transaction relationships in databases
-