

Seyed Salar SEFATI

I am a third-year Ph.D. candidate at POLITEHNICA University of Bucharest, specializing in the *European Commission Marie Curie Motor 5G Project No. 861219*. As a Marie Curie Fellow, I am passionate about innovation and excellence in *Internet of Things (IoT)*. My academic journey is driven by a commitment to impactful research, leading to nearly *10 publications in ISI Q1-Q2 journals and nearly 10 conference papers*. I am scheduled to defend

EDUCATION AND QUALIFICATION

■ Sep 2021 - July 2024

PhD in Telecommunications and Information Technology

POLITEHNICA University of Bucharest, Romania

I am currently pursuing my PhD in the field of Ultra-Reliability and Low Latency in IoT, under the expert supervision of Professor Simona Halunga. Alongside my doctoral research, I am actively involved as a researcher in the European Union's Marie Curie Motor 5G project. My academic journey is marked by significant scholarly contributions, evidenced by the *publication of nearly 20 papers in high-impact ISI journals, both Q1 and Q2 ranked* and well known conference. I will do my defense on 30 June 2024.

■ Sep 2019 - Jun 2021

Master of Computer Engineering (Software)

Islamic Azad University of Tabriz, Iran

I hold a Master's degree in Computer Engineering with a specialization in software. My thesis focused on service composition in the IoT. During my Master's program, I demonstrated a strong commitment to academic excellence and research by *publishing four papers in Q1 and Q2 ISI journals. I achieved third rank among 136 students, maintaining an impressive GPA of 3.96/4*. This dedication laid a solid foundation for my current pursuits as a third-year Ph.D. candidate, specializing in advanced telecommunications research.

■ Sep 2015 - Jun 2019

Bachelor of Computer Engineering (Software)

Islamic Azad University of Tabriz, Iran

WORK EXPERIENCE

■ September 2021- September 2024

Early Stage Researcher (ESR_13) Motor 5G project

POLITEHNICA University of Bucharest, Romania

My research aims to demonstrate how ultra-reliable low-latency communications (URLLC) can enhance IoT applications in Industry 4.0, where reliability and low latency are critical. NB-IoT, a cellular IoT solution, offers better coverage and latency than LPWAN technologies. My work as ESR13 focuses on developing these capabilities. Project Details Budget: ~€4M Duration: 36 Months
www.motor5g.eu

Address

Phone number

Email

Date of birth

Nationality

IRANIAN

Marital status

Single

Project

Marie Curie
Research fellow ship
Motor5G
www.motor5g.eu



WORK EXPERIENCE

■ Jul2023 - Dec2023

Visiting Researcher

[Aarhus University , Aarhus , Denmark](#)

In my role within the Motor 5G project, I conducted research focused on *resource allocation in 6G networks*, specifically tailored to IoT applications. Collaborating closely with *Prof. Albena Mihovska*, a prominent professor in Denmark with a notable H-Index, and *Prof. Ramjee Prasad, who has an H-Index of 79*, allowed me to contribute significantly to this transformative field while gaining invaluable mentorship and insights from esteemed experts.

■ Jul2023 - Dec2023

Visiting Researcher

[Sofia tech park , Sofia, Bulgaria](#)

As part of my involvement in the Motor 5G project under the Marie Skłodowska-Curie Innovative Training Network, my research focused on service composition and selection within IoT and cloud computing environments. This work aimed to enhance system efficiencies and optimize resource allocation by integrating advanced service management techniques.

■ Sep 2021 - Jul 2022

Teaching assistant

[Politehnic University of Bucharest](#)

Following the completion of my PhD degree in Information Technology I embarked on a teaching career where I instructed Bachelor's degree students in key web development technologies, including PHP, HTML, JavaScript, Bootstrap, and SQL Server.

■ Sep 2019 - Jul 2021

Teaching assistant

[Islamic Azad University of Tabriz](#)

Following the completion of my Master degree in computer engineering I embarked on a teaching career where I instructed Bachelor's degree students in a AWS and IoT embeded system.



Achivment

- ★ At 27 years old, I am the youngest PhD researcher involved in the Motor 5G project.
- ★ Received the Best Hot Paper Award at the WPMC) 2022 conference for my paper A Novel nRouting Protocol based on Prediction of Energy Consumption and Link Stability in Mobile Internet of Things (MIoT).
- ★ Secured multiple grants totaling approximately €20,000 for conference travel and project equipment procurement
- ★ Supervised Master's students at Islamic Azad University,
- ★ Published four ISI journal papers in Q1 and Q2 journals, including the IEEE Internet of Things Journal, during the Master's degree program.
- ★ Achieved 3rd rank out of 134 students in the Master's program with a final GPA of 3.94/4.0.
- ★ Recognized as a member of the Iranian elite during the Master's degree program
- ★ Ranked higher than 99% of all members who first published in 2021 on ResearchGate



JOURNAL PUBLICATION

Demonstrated extensive leadership in research with over 80% of publications where I served as the First Author and Corresponding Author, reflecting a strong capability in driving projects from Conception through to publication and peer correspondence.

1. A Bioinspired Test Generation Method Using Discretized and Modified Bat Optimization Algorithm *Mathematics journal* 12 (2), 186, 2024
2. Meet User's Service Requirements in Smart Cities Using Recurrent Neural Networks and Optimization Algorithm *IEEE Internet of Things Journal*, 2023
3. QoS-based routing protocol and load balancing in wireless sensor networks using the markov model and the artificial bee colony algorithm *Peer-to-Peer Networking and Applications Journal*, 2023
4. Ultra-reliability and low-latency communications on the internet of things based on 5G network: Literature review, classification, and future research view *Transactions on Emerging Telecommunications Journal*, 2023
5. A hybrid heuristic algorithm using artificial agents for data replication problem in distributed systems *Symmetry Journal* 2023
6. A Hybrid Service Selection and Composition for Cloud Computing Using the Adaptive Penalty Function in Genetic and Artificial Bee Colony Algorithm *Sensor MDPI journal* 2022
7. Cluster selection for load balancing in flying ad hoc networks using an optimal low-energy adaptive clustering hierarchy based on optimization approach , *Aircraft Engineering and Aerospace Technology* 2022
8. Detecting sybil attack in vehicular ad-hoc networks (vanets) by using fitness function, signal strength index and throughput *Wireless Personal Communications Journal* 2022
9. Load balancing in cloud computing environment using the Grey wolf optimization algorithm based on the reliability: performance evaluation, *The Journal of Supercomputing*
10. A QoS-Aware Service Composition Mechanism in the Internet of Things Using a Hidden-Markov Model-Based Optimization Algorithm , *IEEE Internet of Things Journal*
11. .Cluster-based data transmission scheme in wireless sensor networks using black hole and ant colony algorithms , *International Journal of Communication Systems*
12. Cluster head selection and routing protocol for wireless sensor networks (WSNs) based on software-defined network (SDN) via game of theory, *Journal of Electrical and Electronic Engineering*



CONFERENCE PUBLICATION

1. Enhancing Internet of Things Security and Efficiency: Anomaly Detection via Proof of Stake Blockchain Techniques *IEEE, International Conference on Artificial Intelligence in Information* 2024
2. RXs Directions based Codebook Solution for Passive RIS Beamforming *IEEE International Black Sea Conference on Communications and Networking* 2023



3. Service Recommendation for a Group of Users on the Internet of Things Using the Most Popular Service **IEEE, International Conference on Modern Circuits and Systems Technologies 2023**

4. A Novel Routing Protocol based on Prediction of Energy Consumption and Link Stability in Mobile Internet of Thing (MIoT) **IEEE, International Symposium on Wireless Personal Multimedia Communications ..., 2023**

5. Mobile sink assisted data gathering for URLLC in IoT using a fuzzy logic system **IEEE International Black Sea Conference on Communications and Networking**

6. Data forwarding to Fog with guaranteed fault tolerance in Internet of Things (IoT) **IEEE, International Conference on Communications (COMM), 2022**

7. Enhancement of Quality of Service (QoS) in Internet of Things based on big data environment using the Harris Hawks algorithm **Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies ..., 2022**