**Siavash Rajabi**

Personal Information

Date of Birth: 9 August 1980

Marital status: Married

Email: siavash.rajabi@gmail.com, siavash.rajabi@hut.ac.ir

Google scholar: <https://scholar.google.com/citations?user=QhTEvqsAAAAJ&hl=en>

Summary of Qualifications:

Electrical, and computer network engineer. Extensive background in teaching, research, and academic managerial tasks. Strong research background in wireless communication systems, Internet of things (IoT), communication networks, and applications of machine learning and deep learning for wireless communication networks. Experienced in developing mathematical models for communication systems. Experienced in MATLAB, Python, and C/C++ programming.

Education:

**PHD: Electrical engineering-Communication systems (Excellent rating, grade 18.23).**

**Shahid Beheshti University/Tehran University, Iran** 2012-2018

 **Thesis:** Resource allocation in device to device communications.

**M.Sc:** **Electrical engineering-Communication systems (Excellent rating, Rank 232 in the national entrance exam).**

**K. N. Toosi University of Technology, Iran** 2003-2006

 **Thesis:** Modeling indoor wireless channels for MIMO systems.

**B.Sc: Electrical engineering (Excellent rating (Rank 82 in the national entrance exam)).**

**Tehran University, Iran** 1998-2003

 **Thesis:** Study the VOIP technology and installation of IP Telephony system in University of Tehran

Academic Experience:

**Assistant Professor, Hamedan University of Technology, Hamedan, Iran**  2018-Present

* Teaching:
	+ Computer networks
	+ Wireless communications
	+ Signal and systems analysis
	+ Fundamentals of communication systems
	+ Digital communications
	+ Engineering mathematics
	+ Linear algebra
	+ Simulation of communication systems
	+ Computer programming (MATLAB, Python, C/C++)
	+ Electrical circuits I, II.
	+ Communication circuits
* Director of Industry Relations and Center for Innovation and Career Guidance in Hamedan university of technology 2021-Present
* Advisor of IEEE student branch of Hamedan university of technology2019-Present

**Lecturer, Bu-Ali Sina University, Hamedan, Iran**  2006-2015

* Teaching:
	+ Signal and systems analysis
	+ Fundamentals of communication systems
	+ Electrical circuits II
	+ Engineering mathematics
	+ Communication circuits

Research Experience:

* **Cellular communication systems analysis and modeling**
	+ 5G/6G related services and technologies (D2D, V2V, MIMO, …)
	+ Resource allocation, power control, and pairing in D2D communications
	+ Applications of EMTR techniques in D2D communications
* **Performance evaluation of wireless communication systems**
	+ Secrecy capacity analysis and performance evaluation of RF/FSO links
	+ Performance evaluation of D2D links

Professional Activity:

* **Journal reviewer (**IEEE ACCESS, IEEE Sensors Journal, Journal of Supercomputing (SUPE)**)**
* **Supervisor and Adviser to Ph.D. and M.Sc. students.**

Other Experience:

* **Programming (C/C++, MATLAB, Python)**
* **Designing LAN/WAN networks**
* **Computer networks administration (Cisco)**
* **Microcontroller programming (Arduino, ARM, PIC)**

Journal and conference articles:

* M. I. Parizi, A. Pourmoslemi, **S. Rajabi** and K. Cumanan, "Power Control and Fuzzy Pairing in V2X Communications," in *IEEE Systems Journal ( Early Access )*, doi: 10.1109/JSYST.2022.3226298.
* Pourmoslemi, A., **Rajabi, S**., Salimi, M. and Ahmadian, A., 2022. Fuzzy Routing Protocol for D2D Communications Based on Probabilistic Normed Spaces. *Wireless Personal Communications*, *122*(3), pp.2505-2520.
* Pourmoslemi, A., **Rajabi, S**., Salimi, M. and Ferrara, M., 2022. A Fuzzy Method for Joint Resource Allocation and Stable Pairing in D2D Communications. *Applied Sciences*, *12*(3), p.1343.
* Saber, M.J. and **Rajabi, S**., 2021. On secrecy performance of millimeter-wave RF-assisted FSO communication systems. *IEEE Systems Journal*, *15*(3), pp.3781-3788.
* Parizi, Mahboubeh Irannezhad, **Siavash Rajabi**, and Mehrdad Ardebilipour. "Joint Pairing and Resource Allocation for V2X Communications." In *2020 10th International Symposium onTelecommunications (IST)*, pp. 72-77. IEEE, 2020.
* Pourmoslemi, Alireza, **Siavash Rajabi**, and Mehdi Salimi. "Selecting the Best Transmitter in Wireless Device-to-Device Communications Using a Fuzzy Decision-Making Method." In *International Online Conference on Intelligent Decision Science*, pp. 509-520. Springer, Cham, 2020.
* Rashed, Salma Kazemi, Reza Asvadi, **Siavash Rajabi**, Seyed Ali Ghorashi, and Maria G. Martini. "Power allocation for D2D communications using max-min message-passing algorithm." *IEEE Transactions on Vehicular Technology* 69, no. 8 (2020): 8443-8458.
* **Rajabi, S**., S. A. Ghorashi, and V. Shah-Mansouri. "Impact of connecting to the nth nearest node in dedicated device-to-device communications." *Electronics Letters* 54, no. 8 (2018): 535-537.
* **Rajabi, Siavash**, Seyed Ali Ghorashi, Vahid Shah-Mansouri, and Hamidreza Karami. "Device-to-device communications using EMTR technique." *IET Signal Processing* 12, no. 3 (2018): 320-326.
* **Rajabi, S**., M. ArdebiliPoor, and M. Shahabadi. "A Method for Modeling Multiple Antenna Channels." *International Journal of Electronics and Communication Engineering* 2, no. 9 (2008): 2052-2055.
* Ebrahimi-Tofighi, N., M. ArdebiliPour, M. Shahabadi, and **S. Rajabi**. "Investigation of the Effect of Fading Correlation on Performance of MIMO Systems Using an RCS Channel Model." In *The 9th International Conference on Advanced Communication Technology*, vol. 3, pp. 1748-1751. IEEE, 2007.
* **Rajabi, S.**, M. Shahabadi, and M. ArdebiliPoor. "Modeling of the correlation coefficients of a receive antenna array in a MIMO multipath channel." In *2006 2nd IEEE/IFIP International Conference in Central Asia on Internet*, pp. 1-4. IEEE, 2006.

Practical projects:

* Installation and commissioning of IP Telephony system, University of Tehran.
* Preparing a laboratory kit using open source tools to test the security of wireless links in University of Tehran and Checking and testing the security of wireless links at the University of Tehran using the above kit.
* Setting up IP Telephony system for Iranian seismic centers.
* Collaboration in Digital Logic board project for Sharif University of Technology Logic Circuit Laboratory.