Name Ramzi Saifan

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Academic rank Associate Professor



#### **Education**

2009 to 2012 PhD in Computer Engineering (GPA=3.96/4) from Iowa State University.

2003 to 2006 Master in Computer Engineering (GPA=87%) from Jordan University of Science and Technology, Jordan

1998 to 2003 Bachelor in Computer Engineering (GPA=80.7%) from Jordan University of Science and Technology,

Jordan. Top 5% of students.

1998 High school (grade = 95.6%) from Jordan and the top student on the school

### **Work Experience**

University of Jordan, Amman/Jordan, Computer Engineering Full time

department head Aug 2017 up to now

University of Jordan, Amman/Jordan, Associate Professor
 Full time

April 2017 up to now

• University of Jordan, Amman/Jordan, School of Engineering Full time

Dean Assistant FOR Computer Affairs Aug 2016 up to Aug 2017

University of Jordan, Amman/Jordan,
 Full time

Assistant Professor Jan 2013 up to April 2017

Iowa State University, Iowa/USA
 Part time

Teaching Assistant (OS, Distributed systems, &digital Jan 2011 up to Dec2012

forensics)

• SEDCO Company, Amman/Jordan, Full time job

Software Support Engineer April 2005 to April 2008

#### Research

# **Research** interests

Computer and network Security, networks, Wireless sensor networks, Cognitive Radio Networks, and Embedded Systems.

# Published Papers:

- 1. **Ramzi R. Saifan**, Khaled Sharif, Mohammad Abu-Ghazaleh, and Mohammad Abdel-Majeed "Investigating Algorithmic Stock Market Trading using Ensemble Machine Learning Methods." Informatica, An International Journal of Computing and Informatica, Accepted in Aug 2020
- 2. **Ramzi R. Saifan**, Anood M. Msaeed, and Khalid A. Darabkh. "Probabilistic and deterministic path selection in cognitive radio network." *IET Communications* 13.17 (2019): 2767-2777.
- 3. **Ramzi R. Saifan**, Tahani Qaisi, Andraws Sweidan, Sharhabeel H. Alnabelsi, & Khalid A. Darabkh. "A Novel Reduced Sensing Time Routing Protocol in Cognitive Radio Networks." International Journal on Communications Antenna and Propagation (IRECAP) [Online], 9.5 (2019): 371-381. Web. 10 Aug. 2020
- 4. **Ramzi R. Saifan**, Ali, L. A., Shreikh, A. A., & Alnabelsi, S. H. (2019, November). Smart Walk: Case Studies on Hybrid Power Generation System of Piezoelectricity and Solar Power. In *2019 International Conference on Electrical and Computing Technologies and Applications (ICECTA)* (pp. 1-6). IEEE.

- 5. Almasaeid, Hisham M., Osameh Al-Kofahi, Sharhabeel H. Alnabelsi, and **Ramzi R. Saifan**. "Tree-based multicast service provisioning with maximum immunity in cognitive radio networks." *Journal of High Speed Networks* Preprint (2019): 1-18.
- Darabkh, Khalid A., S. Wala'a, Mohammed Hawa, and Ramzi R. Saifan. "MT-CHR: a modified threshold-based cluster head replacement protocol for wireless sensor networks." Computers & Electrical Engineering 72 (2018): 926-938.
- 7. Darabkh, Khalid A., Laila Haddad, Saadeh Z. Sweidan, Mohammed Hawa, **Ramzi R. Saifan**, and Sharhabeel H. Alnabelsi. "An efficient speech recognition system for arm-disabled students based on isolated words." *Computer Applications in Engineering Education* 26, no. 2 (2018): 285-301.
- Ramzi R. Saifan, Waleed Dweik, & Mohammad Abdul-Majeed (2018). A machine learning based deaf
  assistance digital system. Computer Applications in Engineering Education. Accepted in Computer
  Applications in Engineering Education.
- 9. Darabkh, K. A., Haddad, L., Sweidan, S. Z., Hawa, M., **Ramzi R. Saifan**, & Alnabelsi, S. H. (2018). An efficient speech recognition system for arm-disabled students based on isolated words. Computer Applications in Engineering Education, 26(2), 285-301.
- 10. Darabkh, K. A., Hawa, M., **Ramzi R. Saifan**, & Ala'F, K. (2017, March). A novel clustering protocol for wireless sensor networks. In Wireless Communications, Signal Processing and Networking (WiSPNET), 2017 International Conference on (pp. 435-438). IEEE.
- 11. Darabkh, K. A., Wala'a, S., Hawa, M., & Ramzi | R. Saifan. (2018). MT-CHR: A modified threshold-based cluster head replacement protocol for wireless sensor networks. Computers & Electrical Engineering.
- 12. Sweidan, S. Z., **Ramzi R. Saifan**, Darabkh, K. A., Abu-Kaff, S., & Al-Ali, S. (2017). Kids' Tracker: An Android Application for Tracking Children. Journal of Software Engineering and Applications, 10(13), 907.
- 13. Zaidan, D., Salem, A., Swidan, A., & Ramzi R. Saifan. (2017, May). Factors affecting keystroke dynamics for verification data collecting and analysis. In Information Technology (ICIT), 2017 8th International Conference on (pp. 392-398). IEEE.
- 14. **Ramzi R. Saifan,** Iyad Jafar, and Ghazi Al Sukkar. "Optimized Cooperative Spectrum Sensing Algorithms in Cognitive Radio Networks." Oxford the Computer Journal, (2017): 835-849.
- Andraws Swidan, Haytham Bani Abdelghany, Ramzi Saifan, and Zeljko Zilic. "Mobility and Direction Aware Ad-hoc on Demand Distance Vector Routing Protocol." Procedia Computer Science 94 (2016): 49-56.
- Sharhabeel H. Alnabelsi, Ramzi R. Saifan, and Hisham M. Almasaeid, "Improving Routing Performance Using Cooperative Spectrum Sensing in Cognitive Radio Networks". International Review on Computers and Software (I.RE.CO.S.), Vol. 11, N. 10, October 2016
- 17. Jafar, Iyad F., Khalid A. Darabkh, Raed T. Al-Zubi, and Ramzi R. Saifan. "An efficient reversible data hiding algorithm using two steganographic images." Signal Processing 128 (2016): 98-109.
- 18. Salem, A., Zaidan, D., Swidan, A., & Saifan, R Saifan. (2016, August). Analysis of strong password using keystroke dynamics authentication in touch screen devices. In Cybersecurity and Cyberforensics Conference (CCC), 2016 (pp. 15-21). IEEE.
- **19.** Al Sukkar, Ghazi, **Ramzi Saifan**, Sufian Khwaldeh, Mahmoud Maqableh, and Iyad Jafar. "Address Resolution Protocol (ARP): Spoofing Attack and Proposed Defense." Communications and Network 8, no. 03 (2016): 118.
- 20. Ramzi Saifan, Ghazi Al-Sukar, Rawaa Al-Ameer, Iyad Jafar. "Energy efficient cooperative spectrum sensing in cognitive radio". International Journal of Computer Networks and Communications (IJCNC). Volume 8, No. 2, March 2016 Issue.
- 21. Amal Ahmad, Andraws Swidan and Ramzi Saifan. "Comparative Analysis of Different Encryption Techniques in Mobile Ad Hoc Networks (MANETS)". International Journal of Computer Networks and Communications (IJCNC). Volume 8, No. 2, March 2016 Issue.
- 22. Ramzi Saifan, Asma Salem, Dema Zaidan, and Andraws Swidan. "A Survey of behavioral authentication using keystroke dynamics: Touch screens and mobile devices". Journal of Social Sciences. Volume 5, No.1, January 2016 Issue.
- 23. Ramzi Saifan. "Proactive Driver Alert System (PDAS) for Drowsy Drivers". Journal of Social Sciences. Volume 5, No.1, January 2016 Issue.
- 24. Celik, Abdulkadir, **Ramzi Saifan**, and Ahmed E. Kamal. "Sensing strategies for channel discovery in Cognitive Radio Networks." Computing, Networking and Communications (ICNC), 2015 International Conference on. IEEE, 2015.
- 25. **Ramzi Saifan**, Ahmed E. Kamal, and Yong Guan. "A Cross Layer Routing Protocol in Cognitive Radio Networks" published in Globecom 2013
- 26. **Ramzi Saifan**, Ahmed E. Kamal, and Yong Guan. "Spectrum Decision for Efficient Routing in Cognitive Radio Network." published in 9th IEEE International Conference on Mobile Adhoc and Sensor Systems (IEEE MASS 2012).
- 27. Ramzi Saifan, AhmedE. Kamal, and Yong Guan. Efficient Spectrum Searching and Monitoring in

- Cognitive Radio Network, In IEEE MASS 2011: proceeding of 8th IEEE International Conference on Mobile Ad-hoc and Sensor Systems (IEEE MASS 2011)
- 28. **Ramzi Saifan**, Yawen Wei, and Yong Guan. A Framework for Cooperative In-Band Sensing in Cognitive Radio Network, In proceeding on the Fifth IEEE Workshop on Networking Technologies for Software Defined Radio (SDR) Networks, pages 1-6, 2010
- Omar Al-Jarrah and Ramzi Saifan. A Novel Key Management Algorithm in Sensor Networks. In MoMM '08: Proceedings of the 6th International Conference on Advances in Mobile Computing and Multimedia, pages291–294, New York, NY, USA, 2008. ACM
- 30. **Ramzi Saifan** and Omar Al-Jarrah. A Novel Algorithm for Defending Path-Based Denial of Service Attacks in Sensor Networks. In International Journal of Distributed Sensor Networks, 2010

### **Supervised Master Students**

- Anood Mahmoud Al-ruheba, Probabilistic and Deterministic Path Selection in Cognitive Radio Network
- 2. Khalid Atef Jarrah, Building Connected Cognitive Radio Ad Hoc Network with Minimum Cost
- 3. Samer Abu Zant, An Improved Greedy Perimeter Stateless Routing (Gpsr) Protocol For Mobile Ad-Hoc Networks.

### **Awards and Honor Societies**

- 1. First position award in the 9<sup>th</sup> national technology parade in the track of "Smart and electronic teaching systems". The project title is "Holo Games". 2016
- 2. First position award in the 8<sup>th</sup> national technology parade in the track of "Business and Social Technologies". The project title is "Efficient Gas Distribution in Jordan". 2015.
- 3. Second position award in the 7<sup>th</sup> national technology parade in the track of "Defense Technology and Safety Applications". The project title is "Detective Droid". 2014.
- 4. Teaching assistantship from Iowa State University, USA for two years (2011 2012).
- 5. Scholarship from the University of Jordan to pursue PhD in the United States, 2009.
- 6. Full grant from the Ministry of Higher Education during my Bachelor study (1998 2003).
- 7. School's First rank in the high school, 1998.

## **Teaching**

Ramzi has taught several classes and laboratories including:

- Network Security,
- Distributed Systems,
- Computer Networks,
- Digital Logic,
- Embedded Systems,
- Data Structures and Algorithms
- Object oriented and problem solving,
- Networks lab,
- Embedded systems lab, and
- Advanced networks lab.

### Languages:

**Arabic** (native) **English** (fluent)