

## Ramin Safa

Health Informatics Researcher

### CONTACT INFORMATION

**Assistant professor**, Department of Computer Engineering  
Ayandegan Institute of Higher Education (AIHE), Tonekabon. Iran.

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### RESEARCH INTERESTS

- Healthcare
- Mental Health Informatics
- Text Mining
- Personalization
- Recommender Systems

### EDUCATION

**Ph.D.** in Computer Engineering (Sept. 2015–Sept. 2022)

Major in Software Systems

Under the Supervision of Dr. Peyman Bayat

GPA: 19.13/20

- Defended by “Excellent” Rank

Rasht Branch, Islamic Azad University (IAU), Rasht, Iran

**M.Sc.** in Information Technology (Sept. 2012–Sept. 2014)

Major in Electronic Commerce

Under the Supervision of Dr. Seyed Abolghasem Mirroshandel

GPA: 17.80/20

- Ranked in the top 5% of university computer engineering students.

*Relevant Coursework (all with grades A+ or A): Business Intelligence, Electronic Commerce, Pervasive Computing, E-Commerce Security, Distributed Systems, Multimedia Systems, and M.Sc. Thesis.*

The University of Guilan, Rasht, Iran

**B.Sc.** in Computer Engineering (Sept. 2009–Jul. 2012)

Major in Software Engineering

GPA: 17.32/20

- Ranked in the top 10% of university computer engineering students.

*Relevant Coursework (all with grades A+ or A): Data Structure, Database Design, Artificial Intelligence, Data Mining, Web Programming, Advanced Programming, Internet Engineering, and Software Engineering.*

Lahijan Branch, Islamic Azad University (IAU), Lahijan, Iran

### PUBLICATIONS

#### Book Chapter

**Safa, R.**, Edalatpanah, S. A., & Sorourkhah, A., “Predicting mental health using social media: A roadmap for future development.” *Deep Learning in Personalized Healthcare and Decision Support*. Academic Press, 2023. <https://doi.org/10.1016/b978-0-443-19413-9.00014-x>

#### Journal Papers

7. Pourkeyvan, A., **Safa R.**, & Sorourkhah, A., “Harnessing the Power of Hugging Face Transformers for Predicting Mental Health Disorders in Social Networks.” *IEEE Access*, 12, 28025-28035. 2024. <https://doi.org/10.1109/ACCESS.2024.3366653>

6. Kuang, M., **Safa, R.**, Edalatpanah, S. A., & Keyser, R. S., “A Hybrid Deep Learning Approach for Sentiment Analysis in Product Reviews.” *Facta Universitatis, Series: Mechanical Engineering*, 21(3), 479-500, 2023. <https://doi.org/10.22190/FUME230901038K>

5. **Safa, R.**, Bayat, P., & Moghtader, L., “Automatic detection of depression symptoms in Twitter using multimodal analysis.” *The Journal of Supercomputing*, 78(4), 4709-4744, 2022. <https://doi.org/10.1007/s11227-021-04040-8>

4. **Safa, R.**, Bayat, P., & Moghtader, L., "Developing clinical decision support systems in psychiatry using microblogging data." *Journal of Decisions and Operations Research*, 7(2), 259-276, 2022. (In Persian) <https://dorl.net/dor/20.1001.1.25385097.1401.7.2.4.1>
3. Taghvaei, F., & **Safa, R.**, "Efficient energy consumption in smart buildings using Personalized NILM-based recommender system". *Big Data and Computing Visions*, 1(3), 161-169, 2021. <https://dx.doi.org/10.22105/bdcv.2022.325031.1039>
2. Javadi, S., **Safa, R.**, Azizi, M., & Mirroshandel, S. A., "A recommendation system for finding experts in online scientific communities." *Journal of AI and Data Mining*, 8(4), 573-584, 2020. <https://doi.org/10.22044/jadm.2020.9087.2045>
1. **Safa, R.**, Mirroshandel, S., Javadi, S., & Azizi, M., "Venue recommendation based on paper's title and co-authors network." *Journal of Information Systems and Telecommunication*, 6(1), 33-40, 2018. <https://doi.org/10.7508/jist.2018.21.005>

### **Conference Papers**

15. Harati, N. and **Safa, R.**, "An Overview of Information Technology and Artificial Intelligence Applications in Management of COVID-19 Pandemic". *Proceedings of the 1<sup>st</sup> Digital Transformation and Intelligent Systems Conference*, Larestan, Fars, December 2021. (In Persian)
14. Abdari, S. and **Safa, R.**, "Personalization and Behavioral Marketing in E-Commerce Websites." *Proceedings of the 6<sup>th</sup> National Conference on Distributed Computing and Big Data Processing*, Tabriz, Iran, March 2021. (In Persian)
13. Taghvaei, F., **Safa, R.**, and Beheshti, H., "Personalization of Energy Consumption in Smart Homes using Machine Learning Technique." *Proceedings of the 6<sup>th</sup> International Conference on Web Research*, Tehran, Iran, April 2020. (In Persian)
12. Taghvaei, F., Rajabi, S., and **Safa, R.**, "Applications of Blockchain in IoT and Healthcare." *Proceedings of the 2<sup>nd</sup> National Congress of Medical Informatics and the 7<sup>th</sup> Electronic Health Conference*, Tehran, Iran, July 2018. (In Persian)
11. Hasanizadeh, P., Yahyapour, S., and **Safa, R.**, "Big Data Analytics in E-Health." *Proceedings of the 4<sup>th</sup> National Conference on Distributed Computing and Big Data Processing*, Tabriz, Iran, May 2018. (In Persian)
10. Meskini, F., Soleymanpour, Sh., and **Safa, R.**, "Utilizing Data Mining Techniques in Social Network Analysis." *Proceedings of the 4<sup>th</sup> National Conference on Distributed Computing and Big Data Processing*, Tabriz, Iran, May 2018. (In Persian)
9. Alavi, S. N., **Safa, R.**, and Beheshti, H., "Analysis of Security Issues in Mobile Payment Protocols." *Proceedings of the International Scientific Conference on Challenges in Engineering, Technology and Applied Sciences*, Dubai, UAE, March 2018. (In Persian)
8. Alavi, S. N. and **Safa, R.**, "A Review of Technologies, Protocols, and Challenges of Mobile Payment Security." *Proceedings of the 2<sup>nd</sup> International Conference on Knowledge-based Research in Computer Engineering & Information Technology*, Tehran, Iran, September 2017.
7. **Safa, R.** and Bayat, P., "Investigate the Starvation Problem in Mutual Exclusion Algorithms From a Game Theory Perspective." *Proceedings of the 3<sup>rd</sup> National Conference on Distributed Computing and Big Data Processing*, Tabriz, Iran, May 2017. (In Persian)
6. Moshirian, M. S., **Safa, R.**, and Beheshti Foroutani, H., "Using Data Mining Techniques in Medicine with a Focus on Heart Disease." *Proceedings of the 3<sup>rd</sup> National Conference on Engineering Science*, Tonekabon, Iran, May 2016. (In Persian)
5. Ekragholipour, M., Khodaverdi, F., and **Safa, R.**, "Investigate the relationship between Cloud Computing, Big Data, and IoT." *Proceedings of the 3<sup>rd</sup> National Conference on Engineering Science*, Tonekabon, Iran, May 2016. (in Persian)

4. **Safa, R.** and Azizi, M., "Information Customization using Publications' Metadata." *Proceedings of the 2<sup>nd</sup> National Conference on Engineering Science*, Tonekabon, Iran, May 2015. (in Persian)
3. **Safa, R.** and Sedaghat, N., "The Risks of E-Banking and Security Issues." *Proceedings of the 2<sup>nd</sup> National Conference on Engineering Science*, Tonekabon, Iran, May 2015. (in Persian)
2. Azizi, M., Mirroshandel, S. A., **Safa, R.**, and Javadi, S., "The Role of Customized Search on Online Scientific Communities and an Approach for Finding Experts". *Proceedings of the 2<sup>nd</sup> National Conference on Applied Researches in Computer Science and Information Technology*, Tehran, Iran, February 2015. (in Persian)
1. **Safa, R.** and Mirroshandel, S. A., "A Model to Determine the Appropriate Publishing Venue." *Proceedings of the 2<sup>nd</sup> National Conference on Meta-Heuristic Algorithm and its Application in Engineering and Science*, Fereydunkenar, Iran, August 2014. (in Persian)

## SCIENTIFIC COMMITTEE MEMBERSHIP

### Journal Peer Reviewing

IEEE Access  
The Journal of Supercomputing  
PeerJ Computer Science  
Journal of Medical Internet Research  
BMC Public Health  
Intelligent Automation and Soft Computing  
Computer Systems Science and Engineering  
Computers Materials & Continua  
Bulletin of Electrical Engineering and Informatics  
Computer Modeling in Engineering & Sciences  
Computers in Human Behavior  
Innovation Management and Operational Strategies  
Advances in Mathematical Physics  
Journal of Fuzzy Extension and Applications  
Journal of Mathematical Problems in Engineering  
Journal of Applied Research on Industrial Engineering  
Journal of Decisions and Operations Research  
International Journal of Research in Industrial Engineering

### Conference Peer Reviewing

**The 4<sup>th</sup> International Symposium on Computer Science and Intelligent Control (ISoCC 2020)** - Newcastle, UK, August 2020.

**The 12<sup>th</sup> International Conference on Data Envelopment Analysis (DEA 12)** - Tonekabon, Iran, October 2020.

- Scientific / Program Committee Member

**The International Joint Conference on Automation Science and Engineering (JCASE 2020)** - Athens, Greece, January 2020.

**The 3<sup>rd</sup> International Conference on Artificial Intelligence in Renewable Energetic Systems (IC-AIRES2019)** - Bechar, Algeria, November 2019.

**The 3<sup>rd</sup> International Symposium on Computer Science and Intelligent Control (ISCSIC 2019)** - Amsterdam, Netherlands, October 2019.

**The 2<sup>nd</sup> International Conference on Bioinformatics and Neurosciences (ICoBN 2019)** - Vancouver, Canada, August 2019.

**International Conference on Bioinformatics and Neurosciences, Nevada (ICoBN 2018)** - Las Vegas, USA. August 2018.

**The International Conference on Innovation and Research in Engineering Sciences (ICIRES 2018)** - Tbilisi, Georgia, July 2018.

**The 2<sup>nd</sup> International Symposium on Computer Science and Intelligent Control (ISCSIC 2018)** - Stockholm, Sweden, September 2018.

**The 2<sup>nd</sup> National Conference on Knowledge and Technology of Electrical, Computer and Mechanical Engineering of Iran** - Tehran, Iran, May 2018.

- Scientific / Program Committee Member

**The International Scientific Conference on Challenges in Engineering, Technology and Applied Sciences** - Dubai, UAE, March 2018.

## **SCIENTIFIC ADMINISTRATION**

### **Journal Management / Editorial Board Membership**

#### **Big Data and Computing Visions**

- Manager / Editorial Board Member

#### **Computational Algorithms and Numerical Dimensions**

- Manager

#### **Journal of Artificial Intelligence and Big Data**

- Editorial Board Member

### **Event Coordination**

**A Series of Workshops of the Computer Students' Scientific Association**  
AIHE, Tonekabon, Iran, May 2022.

**A Series of Specialized Lectures of the Research Week of the Faculty of Electrical and Computer Engineering**  
AIHE, Tonekabon, Iran, December 2022.

**Futurology and the Cognitive Science Workshop**  
Tonekabon, Iran, October 2018.

### **Scientific Secretariat**

**The 1<sup>st</sup> Seminar on Applied Research in Computer, Information Technology, and Electrical Engineering**  
Tonekabon, Iran, December 2017.

**The 3<sup>rd</sup> National Conference on Engineering Science**  
Tonekabon, Iran, May 2016.

## **PRESENTATIONS AND WORKSHOPS**

#### **Impact of AI on Future Job Roles**

Career Week, AIHE, Tonekabon, Iran, April 2023.

#### **Towards Predicting Mental Health Using Social Data Mining**

Research Week, AIHE, Tonekabon, Iran, December 2022.

#### **Personalization and Recommender Systems**

The First Seminar on Applied Research in Computer, Information Technology, and Electrical Engineering, Tonekabon, Iran, December 2017.

#### **Reference Management Software and Tools**

AIHE, Tonekabon, Iran, November 2016.

#### **Application of Recommender Systems in Online Scientific Communities**

Research Week Conference, University of Guilan, Rasht, Iran, December 2013.

## **LEADERSHIP EXPERIENCE**

**Department Head, Faculty of Computer Engineering (2023-Present)**  
AIHE, Tonekabon, Iran

## WORKING EXPERIENCES

**IT Consultant** (2022-Present)  
REA Press

**Faculty Member and Technical Director of the Innovation Hub** (2021-Present)  
Ayandegan Innovation Hub, AIHE

**IT Consultant** (2017-2022)  
Tarannom Company

**IT Consultant and Webmaster** (2017-2021)  
TJ Software Solutions

## TEACHING EXPERIENCES

**Faculty Member** (2013-Present)  
AIHE, Tonekabon, Iran  
Teaching: Web Programming, Internet Engineering, Data Mining, E-Commerce, and Advanced Topics

**Lecturer** (2013-Present)  
Tonekabon Branch, Islamic Azad University (IAU), Tonekabon, Iran  
Teaching: Web Programming, Internet Engineering, Data Mining, Scientific and Technical Presentation, and Computer Workshop

**Lecturer** (2016-2017)  
Ramsar Branch, Islamic Azad University (IAU), Ramsar, Iran  
Teaching: Fundamentals of Programming

**Lecturer** (Spring 2017)  
Kasra Institute of Higher Education, Ramsar, Iran  
Teaching: Web Programming

**Lecturer** (2013-2016)  
Sama Technical and Vocational Training College, Tonekabon Branch, Islamic Azad University, Tonekabon, Iran  
Teaching: Scientific and Technical Presentation, Software Engineering, and Fundamental of Programming

**Lecturer** (2015-2016)  
Roudaki Institute of Higher Education, Tonekabon, Iran  
Teaching: Computer Workshop and Advanced Topics

**Teaching Assistant** (Fall 2014 & Spring 2015)  
The University of Guilan, Rasht, Iran  
Business Intelligence and Advanced Topics (Dr. Seyed Abolghasem Mirroshandel)

## STUDENT SUPERVISION

**Supervisor and Examiner** of more than 40 M.Sc. Theses.

**Faculty Advisor** (2022-Present)  
Students' Scientific Association, AIHE, Tonekabon, Iran

## REFERENCES

Available on Request.

*February 2024*