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

- Personalization
- Mental Health Informatics
- Text Mining

• 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. Elsevier*, Academic Press, 2023. https://doi.org/10.1016/b978-0-443-19413-9.00014-x

Preprint

Pourkeyvan, A., **Safa R.**, & Sorourkhah, A., "Harnessing the Power of Hugging Face Transformers for Predicting Mental Health Disorders in Social Networks." *arXiv preprint arXiv:2306.16891*. https://doi.org/10.48550/arXiv.2306.16891

Journal Papers

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 1st 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 6th National Conference on Distributed Computing and Big Data Processing*, Tabriz, Iran, March 2021. (In Persian)
- 13. Taghvai, F., **Safa, R.**, and Beheshti, H., "Personalization of Energy Consumption in Smart Homes using Machine Learning Technique." *Proceedings of the 6th International Conference on Web Research*, Tehran, Iran, April 2020. (In Persian)
- 12. Taghvai, F., Rajabi, S., and **Safa, R.**, "Applications of Blockchain in IoT and Healthcare." *Proceedings of the 2nd National Congress of Medical Informatics and the 7th 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 4th 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 4th 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 2nd 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 3rd 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 3rd 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 3rd 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 2nd 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 2nd 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 2nd 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 2nd National Conference on Meta-Heuristic Algorithm and its Application in Engineering and Science*, Fereydounkenar, 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

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 4th International Symposium on Computer Science and Intelligent Control (ISoCC 2020) - Newcastle, UK, August 2020.

The 12th 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 3rd International Conference on Artificial Intelligence in Renewable Energetic Systems (IC-AIRES2019) - Bechar, Algeria, November 2019.

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

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

The 2nd 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 1st Seminar on Applied Research in Computer, Information Technology, and Electrical Engineering

Tonekabon, Iran, December 2017.

The 3rd 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

Career 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 Electrical and Computer Engineering (2023-Present)

AIHE, Tonekabon, Iran

WORKING EXPERIENCES IT Consultant (2022-Present)

REA Press

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, Advanced Topics

Lecturer (2013-Present)

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

Teaching: Web Programming, Internet Engineering, Data Mining, Scientific and Technical

Presentation, 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, Fundamental of

Programming

Lecturer (2015-2016)

Roudaki Institute of Higher Education, Tonekabon, Iran

Teaching: Computer Workshop, 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 20 M.Sc. Theses.

Faculty Advisor (2022-Present)

Students' Scientific Association, AIHE, Tonekabon, Iran

REFERENCES

Available on Request.