I am an experienced data scientist in solution innovation and designing models that interested in dealing with real-world applications. My Research comprised of experiences like Machine Learning, Fuzzy Logic, Variety of Learning Classifiers, Data Mining, Soft Computing, and Optimization. Recently Deep learning algorithms have attracted so many attentions in Machine-learning scientist's community; therefore, in recent years I focused more on Deep Learning especially in image related applications. I strongly believe in learning and sharing my knowledge with my colleagues. Through years of experience, I have developed excellent communication, problem solving, and organizational skills along with good published papers.

Education

Ph.D, Computer Science (Artificial Intelligence)

University Technology Malaysia, Johor Baharu, Malaysia, October 2011– October 2015
Dissertation Title: “Software Fault Prediction Models Using Machine Learning Approach”
Advisor: Prof. Dr. Ali Selamat.

M.S, Computer Application

University of Mysore, Mysore, Karnataka, INDIA, 2005 – 2008
Dissertation Title: “Enhancement of Test Documentation Tools”
Advisor: Prof. Dr. Guru D.S.

Bachelor of Computer Engineering (Software)
Islamic Azad University, Central Tehran Branch, Tehran, Iran, 1997 – 2002
Dissertation Title: “Timesheet Software”
Advisor: Dr. Asghari

Computer Skills:

Programming Languages:

- MATLAB,
- C and C++,
- Python,
- Java,
- PHP,
- Visual Basic,
- C#.Net,
- ASP. Net,
- Visual Basic.Net,
- R,
- Rapid Miner, and
- Weka

Database and Report Generators:

- MS-SQL Server,
- Microsoft Access, and
- Crystal Report

Communication Skills:

- Excellent team work skills.
- Strong problem solving and creative thinking skills.
- Excellent negotiation skills.
- Ability to work without supervision and great self-management skill.

- Ability to work under pressure and priorities multiple deadlines.
- Excellent written and verbal communication skills.
- Superb sense of responsibility and willingness to undertake new tasks.

Languages

- English (Fluent)
- German (intermediate)
- Persian (Mother Tongue)
- French (at Beginning Level)

Awards and Achievements

- Certificate of Excellence (Ph,D Thesis), University Technology Malaysia. Malaysia.
- First Class with Distinction (Master Degree), University of Mysore. India.
- Best Paper Award, 11th IEEE International Symposium on Distributed Computing and Artificial Intelligence (DCAI 2014), Spain.
- Best Teacher Award in Research (2016), Shahabdanesh University. Iran.
- Received IDF (International Doctoral Fellowship) SCHOLARSHIP (4 Semesters).
- Scientific Secretary of *24th National and 2nd International Iranian Conference on Biomedical Engineering (ICBME2017),* Amirkabir University of Technology, Tehran, IRAN, 30 Nov - 1 Dec 2017.
- Scientific Secretary of *25th National and 3rd International Iranian Conference on Biomedical Engineering (ICBME2018),* Shahabdanesh University, Qom, IRAN, 29 - 30 Nov *2018*
- Bioinformatics track – chair of *24th National and 2nd International Iranian Conference on Biomedical Engineering (ICBME2017),* Amirkabir University of Technology, Tehran, 30 Nov - 1 Dec 2017.
- Bioinformatics track – chair of *25th National and 3rd International Iranian Conference on Biomedical Engineering (ICBME2018),* Shahabdanesh University, Qom, 29-30 Nov *2018*

Selected Publications (in English)

Journals:

1. Sepehrnia, M., Sheikhzadeh, G., Abaei, G., & Motamedian, M. (2019). Study of flow field, heat transfer, and entropy generation of nanofluid turbulent natural convection in an enclosure utilizing the computational fluid dynamics- artificial neural network hybrid method. *Heat Transfer—Asian Research*, *48*(4), 1151-1179, ISI.
2. Abaei, G., Selamat, A., & Al Dallal, J. (2018). A Fuzzy Logic Expert System to Predict Module Fault Proneness using Unlabeled Data. *Journal of King Saud University-Computer and Information Sciences,*ISI, Elsevier.
3. Abdolkarimi, E. S., Abaei, G., & Mosavi, M. R. (2018). A wavelet-extreme learning machine for low-cost INS/GPS navigation system in high-speed applications. *GPS Solutions*, 22(1), 15. Springer, ISI, IF:3.049.
4. Roshanfekr, M., Abaei, G., Ebrahimpour Komleh, H. (2018). Designing a Type-2 Fuzzy Expert System to Improve Fuzzy Association Rule Mining Weakness for Diagnosis of Diabetes Disease, *Journal of Distributed Computing and Distributed Systems*, 1 (In Farsi)
5. Abaei, G., Selamat, A., & Fujita, H. (2015). An empirical study based on semi-supervised hybrid self-organizing map for software fault prediction. *Knowledge-Based Systems*, 74, 28-39. Elsevier, ISI, IF:5.101.

6. Abaei, G., Mashinchi, M. R., & Selamat, A. (2015). Software fault prediction using BP-based crisp artificial neural networks. *International Journal of Intelligent Information and Database Systems*, 9(1), 15-31. Scopus.
7. Rezaei, Z., Kasmuni, M. D., Selamat, A., Shafry, M., Rahim, M., Abaei, G., & Kadirb, M. R. A. (2015). Comparative Study of Clustering Algorithms in order to Virtual Histology (VH) Image Segmentation. *JURNAL TEKNOLOGI*, 75(2), 133-139, ISI.
8. Abaei, G., & Selamat, A. (2014). Increasing the Accuracy of Software Fault Prediction using Majority Ranking Fuzzy Clustering. *International Journal of Software Innovation (IJSI)*, 2(4), 60-71. ISI.
9. Abaei, G., & Selamat, A. (2014). A survey on software fault detection based on different prediction approaches. *Vietnam Journal of Computer Science*, 1(2), 79-95. Springer.
10. Abaei, G., & Selamat, A. (2012). Analysis of Software Fault Prediction Models Using Machine Learning Techniques. *International Journal of Computer & Information Science*,13(2), 29-36.

Conferences:

1. Nedaee, M., & Abaei, G. (2019) Automated Detection of Coronary Artery Disease from ECG with Convolution Neural Network (Submitted).
2. Rezaee, F., Abaei, G., & Rezaei, Z. (2019). Diagnosis of Diseases from Tongue Images using Machine Learning Techniques. (Submitted)
3. Sepehrnia, M., Abaei, G., Khosromirza, Z., & RooghaniYazdi, F. (2018, November). Numerical Simulation and Designing Artificial Neural Network for Water-Diamond Nanofluid Flow for Micro-Scale Cooling of Medical Equipment. In *2018 25th National and 3rd International Iranian Conference on Biomedical Engineering (ICBME)* (pp. 1-6). IEEE, Qom, Iran.
4. Rezaei, Z., & Abaei, G. (2017, November). A Robust Fingerprint Recognition System Based on Hybrid DCT and DWT. In *2017 24th National and 2nd International Iranian Conference on Biomedical Engineering (ICBME)* (pp. 330-333). IEEE, Tehran, Iran.
5. Roshanfekr, M., & Abaei, G. (2017, November), A New Automated Segmentation Method Using Support Vector Machine and Firefly Algorithm to Detect the Type of Liver Tumor. In *2017 24th National and 2nd International Iranian Conference on Biomedical Engineering (ICBME)*, Tehran, Iran (In Farsi).
6. Alizadeh, A., Eshaghi, Amin., & Abaei, G. (2016, June) Segmentation of Brain Lesions in MRI Images using Watershed, FCM and K-means Algorithms. In *International Conference on Computer Engineering & IT (CIT2016),* Tehran, Iran (In Farsi)
7. Dabiri, M., Khosharay, K., & Abaei, G . (2016, January). Anomaly-based intrusion detection system using Relational Detector Tree (RTD). In *2nd International Conference on Electrical Engineering and Computer Science (ICEECS 2016),* Shiraz, Iran.
8. Kazemi, M., Abaei, G., & Aghakoochaki, H . (2016, May). Identifying license plate region, using fuzzy logic system. In *1st International Conference on New Research Achievement in Electrical and Computer Engineering*, Tehran. Iran.
9. Abaei, G., & Selamat, A. (2014, June). Software fault prediction based on improved fuzzy clustering. In *11th International Conference on Distributed Computing and Artificial Intelligence*, (pp. 165-172). Springer, Salamanca, Spain.

10. Abaei, G., Rezaei, Z., & Selamat, A. (2013, November). Fault prediction by utilizing self-organizing Map and Threshold. In *International Conference on Control System, Computing and Engineering (ICCSCE)*, (pp. 465-470). IEEE, Pinang, Malaysia.
11. Ikhani, A., & Abaee, G. (2010, October). Extraction test cases by using data mining; reducing the cost of testing. In *International Conference on Computer Information Systems and Industrial Management Applications (CISIM)*, (pp. 620-625). IEEE, Krackow, Germany.
12. Abaee, G., & Guru, D. S. (2010, October). Enhancement of Bug Tracking Tools; the Debugger. In *2nd International Conference on Software Technology and Engineering (ICSTE)*, (Vol. 1, pp. V1-165). IEEE, San Juan, Puerto Rico, USA.
13. Abaee, G., & Yaghini, P., (2010), Test Documentation Tools and CBR; Reduce the Cost of Testing. In *9thInternational Conference on Computer Science, Computer Engineering, and Applied Computing (SERP'10)*, (pp. 270-276), Las Vegas, USA.
14. Ikhani, A., & Abaee, G. (2010). Knowledge Discovery from Iranian Capital Market by Using Data Patterns Clustering, In *5th International Conference on E-Commerce in Developing Countries: with Focus on Export (ECDC 2010)*, (pp. 242-246), Kish, Iran.

Book Chapter:

- Abaei, G., & Selamat, A. (2014). Important issues in software fault prediction: A road map. In *Handbook of Research on Emerging Advancements and Technologies in Software Engineering* (pp. 510-539). IGI Global.

As Reviewer:

- Applied Soft Computing, Elsevier
- Applied Intelligence (APIN), Springer
- *24th National and 2nd International Iranian Conference on Biomedical Engineering (ICBME2017)*
- *25th National and 3rd International Iranian Conference on Biomedical Engineering (ICBME2018).*

Work Experience:

As Lecturer and Faculty Member

- Head of Research in Shahabdanesh University, Iran (Since 2015)
- As Faculty Member in Shahabdanesh University, Iran (Since 2007)
  - *Machine Learning*
  - *Neural Networks*
  - *Artificial Intelligence*
  - *Advanced Programming*
  - *Information Storage & Retrieval*
  - *Evolutionary Computing*
- As Lecturer in Islamic Azad University, Booeen Zahra, Iran (2015)
  - *Advanced Software Engineering*
  - *Neural Networks*
  - *Evolutionary Computing*
- As Lecturer in Kharazmi University, Iran (2015)
  - *Neural Networks*

- As TA in University of Mysore, India (2005)
  - *C Programming*
- As TA in University Technology Malaysia. Malaysia (2012- 2013)
  - *Data Mining*
  - *PHP Programming*

In Industry

- Computer *Research and Development Center, Shahabdanesh University, Iran.*
  - As project manager and system analyst
    - Lecturer *Payment* Package (March 2016- March 2018)
    - Course Matching System (June 2016- July 2017)
    - Wireless Sensor Network for Shahabdanesh Greenhouse (January 2017- September 2017).
- *Malaysian Ministry of Science, Malaysia. (March 2013- December 2014)*
  - Development of Enhanced Computational Intelligence Software for Oil and Gas Reservoir Characterization as system analyst and developer
- *Dadeh Pardazan Ehdos Co., Iran (2000-2004)*
  - Worked in programming and testing team in
    - CMMS (Computerized Maintenance Management System)
    - SPIR (Spare Parts and Interchangeability Record)
    - Integrated Management System and Ordered Software for Energy Management
    - Technical Archive System
    - Accounting System
    - Warehouse System
  - Worked as a project manager, also worked in analysis and design, programming, testing and maintenance team
    - Office Automation System
    - Mine System
    - Cultural Data System of Tehran University
    - Timesheet System
    - Data Recording System of Test and Debugging of Software

References:

- Prof. Dr. Ali Selamat, Faculty Member of University Technology Malaysia (Faculty of Computing), selamat.ali@gmail.com, aselamat@utm.my.
- Prof. Dr. Farzad Towhidkhah, Faculty Member of Amirkabir University of Technology (Faculty of Biomedical Engineering), towhidkhah@gmail.com, Towhidkhah@aut.ac.ir.
- Prof. Dr. Mehdi Karrari, Faculty Member of Amirkabir University of Technology (Faculty of Electrical Engineering) and Head of Shahabdanesh University, karrari@aut.ac.ir.
- Dr. Hamsaveni, Faculty Member of University of Mysore, (Faculty of Computer Science), hamsa1367@gmail.com.