

Education:**Ph.D, Computer Science (Artificial Intelligence)**

University Technology Malaysia (UTM), Johor, Malaysia, October 2011– August 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, January 2005 – June 2008

Dissertation Title: “Enhancement of Test Documentation Tools”

Advisor: Prof. Dr. Guru D.S.

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)
- Arabic (School Arabic)

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:*Journals:*

1. Abdolkarimi, E. S., Abaei, G., Selamat, A., & Mosavi, M. R. (2020). A hybrid Type-2 Fuzzy Logic System and Extreme Learning Machine for low-cost INS/GPS in high-speed vehicular navigation system. *Applied Soft Computing*, 106447, Elsevier, ISI, IF: 4.873.
2. Davahli, A., Shamsi, M., & Abaei, G. (2020). Hybridizing genetic algorithm and grey wolf optimizer to advance an intelligent and lightweight intrusion detection system for IoT wireless networks. *Journal of Ambient Intelligence and Humanized Computing*, Springer, ISI, IF:1.91.
3. Davahli, A., Shamsi, M., & Abaei, G. (2020). An Intelligent Feature Selection Technique through Combining Genetic and Grey Wolf Algorithms to Advance a Lightweight Intrusion Detection for Wireless Networks in IoT. *Journal of Computing and Security*, ISC.
4. Sepehri, 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.
5. 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*, Elsevier, ISI.
6. 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.
7. Roshanfekar, 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)
8. 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.
9. 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.
10. 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.
11. 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.
12. 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.
13. 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 (only in English):

1. 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.
2. 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.
3. 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.
4. 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.
5. Abaei, G., & Selamat, A. (2014, June). Software fault prediction based on improved fuzzy clustering. In *11th International Symposium on Distributed Computing and Artificial Intelligence*, (pp. 165-172). Springer, Salamanca, Spain.
6. 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.
7. Ikhani, A., & Abae, 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.
8. Abae, 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.
9. Abae, G., & Yaghini, P., (2010), Test Documentation Tools and CBR; Reduce the Cost of Testing. In *9th International Conference on Computer Science, Computer Engineering, and Applied Computing (SERP'10)*, (pp. 270-276), Las Vegas, USA.
10. Ikhani, A., & Abae, 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.

Work Experience:**As Lecturer and Faculty Member**

- Research Manager in Shahabdanesh University, Iran (Since March 2017)
- As Faculty Member in Shahabdanesh University, Iran (Since February 2009)
 - *Machine Learning*
 - *Neural Networks*
 - *Artificial Intelligence*
 - *Evolutionary Computing*
 - *Software Engineering*
 - *Information Storage & Retrieval*
 - *Database Management Systems*
 - *Operating Systems*
 - *Advanced Programming*
- As Lecturer in Islamic Azad University, Booeen Zahra, Iran (October 2015-February 2016)
 - *Advanced Software Engineering*
 - *Neural Networks*
 - *Evolutionary Computing*
- As Lecturer in Islamic Azad University, Roodehen, Iran (February 2009-August 2011)
 - *Operating Systems*
 - *Advanced Programming*
- As Lecturer in Kharazmi University, Iran (October 2015-February 2016)
 - *Neural Networks*
- As TA in University of Mysore, India (October 2005-December 2005)
 - *C Programming*
- As TA in University Technology Malaysia. Malaysia (January 2012-July 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 (March 2001-June 2005)
 - *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 in*
 - Office Automation System
 - Mine System
 - Cultural Data System of Tehran University
 - Timesheet System
 - Data Recording System of Test and Debugging of Software