

# Resume

Computer Scientist, Researcher, and Teacher.

## Basic information

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Name	Dr. Saima Gulzar Ahmad
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## Objective

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To practice my research and teaching skills with innovation using emerging smart Technologies in Computer Science and Information Technology.

## Work experience

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June 2018 - Present	<b>Assistant Professor</b> <b>COMSATS University Islamabad, Wah Campus</b> Working as Assistant Professor in COMSATS University Islamabad, Wah Campus, Wah Cantt in Computer Science Department. <ul style="list-style-type: none"><li>Teaching and Research</li></ul>
Sep. 2017 - June 2018	<b>Assistant Professor</b> <b>University of Wah, Computer Science Dept.</b> Served as Assistant Professor in University of Wah, Wah Cantt in Computer Science Department. <ul style="list-style-type: none"><li>Teaching and Research</li></ul>
January 2014 - June 2014	<b>Lecturer Computer Science</b> <b>University of Wah</b> <ul style="list-style-type: none"><li>Taught Object Oriented Courses.</li></ul>
August 2012 - January 2013	<b>Department Coordinator/ Lecturer (Computer Science)</b> <b>National University of Sciences and Technology (NUST)</b> <ul style="list-style-type: none"><li>Managed the departmental administrative activities.</li><li>Taught undergraduate computer science courses.</li></ul>
August 2001 - May 2010	<b>Manager (Electronics Division)</b> <b>National Engineering &amp; Sciences Commission (NESCOM)</b> <ul style="list-style-type: none"><li>Ensure that management is able to monitor the progress of all projects, so that strategic and remedial action can be taken well in time and changes in the project plan can be communicated if needed.</li><li>Ensure the prioritization and assessment of all projects on an ongoing basis.</li><li>Develop the strategy for the promotion of effective and efficient project</li></ul>

management in the technical divisions.

- Ensure that all documentation and reporting is stored accurately so that historical documents can be made available to the project managers for knowledge sharing and learning.
- Develop and implement effective plans to improve the quality of projects delivery.

## Education

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May 2013 - July 2017	<b>PhD in Computer Science</b> <b>University of Malaya, Malaysia.</b>
October 2010 - July 2012	<b>MS in Computer Science</b> <b>COMSATS, Institute of Information Technology, Pakistan.</b> MS with distinction (GPA 4.0)
May 1997 - June 2001	<b>Bachelor of Science in Electrical Engineering</b> <b>University of Engineering and Technology, Taxila, Pakistan.</b> Degree achieved with honor.

## PhD Thesis

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*"Workflow Optimization in Distributed Computing Environment for Stream-based Data Processing Model"*, Supervised by **Dr. Chee Sun Liew, Director Data-intensive Computing Center (DICC), Department of Computer Science and Information Technology, University Malaya, Malaysia.**

## Research Interests

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1. Parallel and distributed computing
2. High performance computing
3. Operating systems
4. Artificial Intelligence

## Journal Publications

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1. Ahmad Hassan, **Saima Gulzar Ahmad**, Tassawar Iqbal, Ehsan Ullah Munir, Kashif Ayyub, and Naeem Ramzan, Enhanced Model for Gestational Diabetes Mellitus Prediction Using a Fusion Technique of Multiple Algorithms with Explainability, International Journal of Computational Intelligence Systems 18(47) , 2025. (ISSN:1875-6883) (I.F.2.5)
2. Muhammad Nadeem, Muhammad Maaz Rehan, **Saima Gulzar Ahmad**, Ehsan Ullah Munir, and Muhammad Waqas Rehan, PFCS: an efficient Path setup and Fast Channel Switching protocol for cognitive mobile IoTs, Ad Hoc Networks, 171, 2025. (ISSN: 1570-8713) (I.F. 4.4 )
3. Samia Ijaz, **Saima Gulzar Ahmad**, Kashif Ayyub, Ehsan Ullah Munir, and Naeem Ramzan, Energy-Efficient, Time and Cost-Constraint Scheduling Algorithm using Improved Multi-objective Differential Evolution in Fog Computing, Journal of Super Computing, Springer, 81, 2024. (ISSN 1573-0484) (I.F. 2.5)
4. Ume Zara, Kashif Ayub, Hikmat Ullah Khan, Ali Daud, Tariq Alsahfi, **Saima Gulzar Ahmad**, Phishing Website Detection Using Deep Learning Models, IEEE Access, 12: 167072 - 167087, 2024. (ISSN 2169-3536) (I.F. 3.4)
5. Ahmad Hassan, **Saima Gulzar Ahmad**, Ehsan Ullah Munir, Imtiaz Ali Khan, Naeem Ramzan, Predictive modelling and identification of key risk factors for stroke using machine learning, Scientific Reports, 14:11498, 2024. (ISSN 2045-2322)(I.F 3.8)
6. **Saima Gulzar Ahmad**, Tassawar Iqbal, Ehsan Ullah Munir, Naeem Ramzan. Cost Optimization in Cloud Environment based on Task Deadline. Journal of Cloud Computing, 12(9): 1-18, 2023. (ISSN: 2192-113X)

(electronic) (I.F 3.148)

7. **Saima Gulzar Ahmad**, Tassawar Iqbal, Anam Javaid, Ehsan Ullah Munir, Nasira Kirn Sana Ullah Jan, Naeem Ramzan. Sensing and Artificial Intelligent Maternal-Infant Health Care Systems: A Review. Sensors(Basel), 22(12): 4362, 2022. (ISSN 1424-8220) (I.F 3.847) Special Issue. E-health System Based on Sensors and Artificial Intelligence.
8. Samia Ijaz, Ehsan Ullah Munir, **Saima Gulzar Ahmad**, M.Mustafa Rafique, Omer F. Rana. Energy-Makespan Optimization of Workflow Scheduling in Fog-Cloud Computing Computing. Computing, Springer. (ISSN 1436-5057) (I.F 3.7)
9. Kashif Ayyub, Saqib Iqbal, Muhammad Wasif Nisar, **Saima Gulzar Ahmad**, Ehsan Ullah Munir. Stance Detection using Diverse Feature Sets based on Machine Learning Techniques. Journal of Intelligent & Fuzzy Systems (Journal indexed by SCI, ISSN 1875-8967) (I.F 2)
10. **Saima Gulzar Ahmad**, Hikmat U. Khan, Samia Ijaz, Ehsan U. Munir. Use case-based evaluation of workflow optimization strategy in real-time computation system. Journal of Super Computing, Springer, Vol. No. 76, pp.708-725, 2020. (ISSN 1573-0484) (I.F 2.557)
11. Anum Masood, **Saima Gulzar Ahmad**, Hikmat U. Khan, Ehsan U. Munir. Network Reconfiguration Algorithm (NRA) for scheduling communication-intensive graphs in heterogenous computing environment. Journal of Cluster Computing, Springer, pp.1-20, 2019. (ISSN 1386-7857) (I.F 2.303)
12. **Saima Gulzar Ahmad**, Chee Sun Liew, M. Mustafa Rafique, Ehsan Ullah Munir. Optimization of Data-intensive Workflows in Stream-based Data Processing Models. Journal of Super Computing, 2017, 73(9), pp.3901-3923. (ISSN 573-0484) (I.F 2.557)
13. **Saima Gulzar Ahmad**, Chee Sun Liew, Ehsan Ullah Munir, Tan Fong Ang, Samee U. Khan. A Hybrid Genetic Algorithm for Optimization of Scheduling Workflow Applications in Heterogeneous Computing Systems. Journal of Parallel Distributed Computing, 2016, 87, pp.80-90. (ISSN 0743-7315) (I.F 4.542)

## Conference Publications

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1. Vaneeza Kiyani, **Saima Gulzar Ahmad**, Tassawar Iqbal, Ehsan Ullah Munir, A Comparative study of Machine Learning Techniques for Maternal Health prediction to Reduce the Women Health Risks During Pregnancy, International Conference on Computing Research ICCoR22, 2022, CUST, Islamabad.
2. **Saima Gulzar Ahmad**, Chee Sun Liew, M. Mustafa Rafique, Ehsan Ullah Munir, Samee U. Khan. Data-Intensive Workflow Optimization based on Application Task Graph Partitioning in Heterogeneous Computing Systems. 4th IEEE International Conference on Big Data and Cloud Computing (BDCloud), Sydney, Australia, on 3-5 December 2014, pp.129-136.
3. **Saima Gulzar Ahmad**, Ehsan Ullah Munir, Muhammad Wasif Nisar. PEGA: A Performance Effective Genetic Algorithm for Task Scheduling in Heterogeneous Systems. 14th IEEE International Conference on High Performance Computing and Communications (HPCC-2012), Liverpool, UK on June 25-27, 2012, pp.1083-1087.
4. **Saima Gulzar Ahmad**, Ehsan Ullah Munir, Muhammad Wasif Nisar. A Segmented Approach for DAG Scheduling in Heterogeneous Environment. International Conference on Parallel and Distributed Computing, Applications and Technologies (PDCAT-11), Gwangju, Korea on 20-22 October 2011, pp.362-367.

## Book Chapters

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1. Muhammad Hanif, Ehsan Ullah Munir, Muhammad Maaz Rehan, **Saima Gulzar Ahmad**, Tassawar Iqbal, Nasira Kirn, Kashif Ayyub, Naeem Ramzan, "Adaptive Secure Multi-modal Telehealth Patient- Monitoring System", Adaptive Secure Multi-modal Telehealth Patient-Monitoring System edited by Masood Ur-Rehman, Ahmed Zoha, Muhammad Ali Jamshed and Naeem Ramzan, Wiley, 2024. [https://online.vitalsource.com/reader/books/9781394257720/epubcfi/6/16\[%3Bvnd.vst.idref%3DAf06\]!/4](https://online.vitalsource.com/reader/books/9781394257720/epubcfi/6/16[%3Bvnd.vst.idref%3DAf06]!/4)

## Professional Affiliations

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- Member, IEEE.
- Registered Engineer, Pakistan Engineering Council.

## Achievements

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1. **ERASMUS+ funded multinational joint project** Sensing, Artificial Intelligence, and Edge networking towards Rural Health Monitoring, 2020. *Total funding for five partner universities: 6,80345 € and CUI, Wah partner funding : 1,37,510 €.*
2. **Higher Education Commission of Pakistan funded Startup Research Grant Project**, 2019. *Funding: 362800 PKR.*
3. **Travel grant from University Malaya**, Malaysia to attend the IEEE Fourth International Conference on Big Data and Cloud Computing (BD Cloud), Sydney, Australia, Dec. 2014 for oral presentation. *Funding : 2000 RM.*
4. **Bright Spark Scholarship** for PhD from University Malaya, Malaysia, 2013. *Funding: 3000 RM monthly for the duration of PhD.*
5. **Highest CGPA (4 out of 4) in MS Computer Science** (Computer Networks) from COMSATS University Islamabad, Wah Campus, 2012.
6. **Degree with honors of BS in Electrical Engineering** (Electronics & Telecommunication) from University of Engineering and Technology, Taxila, 2001.