

## Academic Resume



**Sanaa Sharaf**

**Associate Professor, Computer Science Department**

### Contact Information.

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### Highest Degree.

2012, Ph.D. in Computer Science, Grid Computing, University of Leeds, UK.

### Academic and Professional Experiences.

1. **2021 - Present**  
Vice Dean, Faculty of Computing and Information Technology, . .
2. **2018 - Present**  
Deputy Director for Academic Affairs, HPC Center, King Abdulaziz University.
3. **2015 - 2018**  
Vice Dean, FCIT - Faisaliah Campus, King Abdulaziz University.
4. **2015 - 2016**  
Vice Dean, Faculty of Computing and Information Technology, University of Jeddah.
5. **2013 - 2015**  
Supervisor of Information System Department, FCIT, King Abdulaziz University.
6. **2012 - 2018**  
Assistant Professor, Computer Science Department, FCIT, King Abdulaziz University.

### Research Interests.

Quality of Service in Grid/Cloud Computing, High Performance Computing, Information and System Security, Fuzzy Systems, Programming Languages, Distributed Systems.

### Teaching Interests.

Programming Languages, High Performance Computing, Applied Math for Computing, Cryptography, Numerical Analysis.

## Certifications and Trainings.

1. How to run Applications on the Aziz Supercomputer, First EAI Conference on Smart Societies Infrastructure, Technologies, and Applications (SCITA 2017) Jeddah, Saudi Arabia, November 2017..
2. GPU Programming for Smart Cities with NVIDIA CUDA, First EAI Conference on Smart Societies Infrastructure, Technologies, and Applications (SCITA 2017) Jeddah, Saudi Arabia, November 2017..
3. Diploma of Professional Development in Teaching and Learning Center for Teaching and Learning Development KAU, 2016.
4. Introduction to High Performance Computing (II), KAU Vice Presidency for Development, April 2015..
5. The Essential Academic Leader, Academic Leadership Center, Ministry of Education, April 2015..
6. Introduction to High Performance Computing (I), KAU Vice Presidency for Development, February 2015.
7. How to be a Strategic Planner, Center of Strategic Studies (CSS), January, 2015.
8. Preparation for Academic Programs Accreditation, KAU Vice Presidency for Development, December 2014..
9. Teamwork and Leadership Development, Quality Side, Manchester, July 2010..
10. Self-Controlling Skills, Saudi Students Club in London, April 2009..
11. Creating Personal Web Pages for Research, University of Leeds, April 2009..
12. Power of Bioinformatics Workshop, Center of Excellence in Genomic Medicine Research, KAU, 2019.
13. HCIA-AI Course, Huawei Certificate valid through Jul 1, 2023.

## Social, Scientific and Professional Affiliation.

1. -, member, IEEE.

## Excellence Awards and Patents.

1. 2012, International, Best Poster Award, 6th Saudi Scientific International Conference, Brunel University.

## Funded Projects.

1. 2018, Development of Secure Cloud-Based Framework for Healthcare Services, KAU

## Publications.

1. Hind Salem Alatawi , Sanaa Abdullah Sharaf, "Review Of Load Balancing Algorithms Inspired By Artificial Bee Colony Algorithm In The Cloud Computing", International Journal Of Wireless Communications And Network Technologies, vol: 12, pp. 14-27, 2023.  
DOI: [10.30534/ijwcnt/2023/021252023](https://doi.org/10.30534/ijwcnt/2023/021252023)
2. Heng Zhao, Huanqing Wang, Ning Xu, Xudong Zhao, Sanaa Sharaf, "Fuzzy Approximation-Based Optimal Consensus Control For Nonlinear Multiagent Systems Via Adaptive Dynamic Programming", Neurocomputing, vol: 553, pp. 126529, 2023.  
DOI: [10.1016/j.neucom.2023.126529](https://doi.org/10.1016/j.neucom.2023.126529)
3. Xudong Zhang, Liang Zhang, Xudong Zhao, Ning Zhao, Sanaa Sharaf, "Real-Time Reachable Set Synthesis Of Takagi–Sugeno Fuzzy Uncertain Singular Systems Based On Adaptive Event-Triggered Scheme", International Journal Of Fuzzy Systems, 2023.  
DOI: [10.1007/s40815-023-01599-7](https://doi.org/10.1007/s40815-023-01599-7)
4. Liang Zhang, Jiawang Wang, Xudong Zhao, Ning Zhao, Sanaa Sharaf, "Event-Based Reachable Set Synthesis For Continuous Delayed Fuzzy Singularly Perturbed Systems", Ieee Transactions On Circuits And Systems Ii: Express Briefs, vol: 71, pp. 246-250, 2023.  
DOI: [10.1109/TCSII.2023.3294913](https://doi.org/10.1109/TCSII.2023.3294913)
5. Saeed Msaad Altalhi, Fathy Elbouraey Eassa, Abdullah Saad Al-Malaise Al-Ghamid, Sanaa Abdullah Sharaf, Ahmed Mohammed Alghamdi, Khalid Ali Almarhabhi, Maher Ali Khemakhem, "An Architecture For A Tri-Programming Model-Based Parallel Hybrid Testing Tool", Applied Sciences, vol: 13, pp. 11960, 2023.  
DOI: [10.3390/app132111960](https://doi.org/10.3390/app132111960)
6. Mahmoud Ragab, Iyad Katib, Sanaa A. Sharaf, Fatmah Y. Assiri, Diaa Hamed, Abdullah AL-Malaise AL-Ghamdi, "Self-Upgraded Cat Mouse Optimizer With Machine Learning Driven Lung Cancer Classification On Computed Tomography Imaging", Ieee Access, pp. 1-1, 2023.  
DOI: [10.1109/ACCESS.2023.3313508](https://doi.org/10.1109/ACCESS.2023.3313508)
7. Norah Abdullah Al-johany, Fathy Elbouraey Eassa, Sanaa Abdullah Sharaf, Amin Y. Noaman, Asaad Ahmed, "Prediction And Correction Of Software Defects In Message-Passing Interfaces Using A Static Analysis Tool And Machine Learning", Ieee Access, pp. 1-1, 2023.  
DOI: [10.1109/ACCESS.2023.3285598](https://doi.org/10.1109/ACCESS.2023.3285598)
8. Liang Zhang, Guangdeng Zong, Xudong Zhao, Ning Zhao, Sanaa Sharaf, "Reachable Set Control For Discrete-Time Takagi-Sugeno Fuzzy Singular Markov Jump System", Ieee Transactions On Fuzzy Systems, pp. 1-11, 2023.  
DOI: [10.1109/TFUZZ.2023.3245634](https://doi.org/10.1109/TFUZZ.2023.3245634)
9. Eman Alqahtani, Nourah Janbi, Sanaa Sharaf, Rashid Mehmood, "Smart Homes And Families To Enable Sustainable Societies: A Data-Driven Approach For Multi-Perspective Parameter Discovery Using Bert Modelling", Sustainability, vol: 14, pp. 13534, 2022.  
DOI: [10.3390/su142013534](https://doi.org/10.3390/su142013534)
10. SHAOFEI WU, SANAA SHARAF, WEI XU, "User-Oriented Intelligence Mining Under The Existence Of Solutions To Integral Boundary Value Problems For Fuzzy Partial Fractional Differential Equations", Fractals, vol: 30, 2022.  
DOI: [10.1142/S0218348X22400631](https://doi.org/10.1142/S0218348X22400631)
11. Aishah Albssami, Sanaa Sharaf, "Heterogeneous Parallel Architecture For Face Detection Enhancement", International Journal Of Computer Science And Network Security, 2022.
12. Hind Salem Alatawi, Sanaa Abdullah Sharaf, "Hybrid Load Balancing Approach Based On The Integration Of Qos And Power Consumption In Cloud Computing", International Journal Of Advanced Trends In Computer Science And Engineering, vol: 10, pp. 1079-1090, 2021.  
DOI: [10.30534/ijatcse/2021/841022021](https://doi.org/10.30534/ijatcse/2021/841022021)

## Publications.

13. Hind Salem Alatawi, Sanaa Abdullah Sharaf, "Toward Efficient Cloud Services: An Energy-Aware Hybrid Load Balancing Approach", International Conference On Computing And Information Technology, University Of Tabuk, Kingdom Of Saudi Arabia. Volume: 01, Issue: Iccit- 1441, Page No.: 392-396, 9th-10th Sep. 2020., 2020.
14. Sanaa Sharaf, "Security Issues In Serverless Computing Architecture", International Journal Of Emerging Trends In Engineering Research, vol: 8, pp. 539-544, 2020.  
DOI: [10.30534/ijeter/2020/43822020](https://doi.org/10.30534/ijeter/2020/43822020)
15. Sanaa A.Sharaf, "Review And Analysis Of Energy Efficient Scheduling Algorithms In Heterogeneous Architectures", Volume:10 Issue:1, 2020.
16. Sanaa A. Sharaf, "Rsa Implementation On A Hetrogeneous Cluster Architecture Using Cpus, Gpus, And Mic", International Journal Of Scientific Engineering And Science, 2020.
17. Bashayer Al-Ahmadi, Sanaa Sharaf, "Blockchain Based Remote Patient Monitoring System", Journal Of King Abdulaziz University Computing And Information Technology Sciences, vol: 8, pp. 111-118, 2019.  
DOI: [10.4197/Comp.8-2.8](https://doi.org/10.4197/Comp.8-2.8)
18. Sanaa Sharaf, Nidal F. Shilbayeh, "A Secure G-Cloud-Based Framework For Government Healthcare Services", Ieee Access, vol: 7, pp. 37876-37882, 2019.  
DOI: [10.1109/ACCESS.2019.2906131](https://doi.org/10.1109/ACCESS.2019.2906131)
19. Maoadah Sait, Amany Alattas, Amnah Omar, Salwa Almalki, Sanaa Sharaf, Ebtehal Alsaggaf, "Employing Virtual Reality Techniques In Environment Adaptation For Autistic Children", Procedia Computer Science, vol: 163, pp. 338-344, 2019.  
DOI: [10.1016/j.procs.2019.12.116](https://doi.org/10.1016/j.procs.2019.12.116)
20. Thaha Muhammed, Rashid Mehmood, Ehab Abozinadah, Sanaa Sharaf, "Selecweb: A Software Tool For Automatic Selection Of Web Frameworks", pp. 329-346, 2019.  
DOI: [10.1007/978-3-030-13705-2\\_14](https://doi.org/10.1007/978-3-030-13705-2_14)
21. A. Alattas, A. Omar, M. Sait, S. Almalki, S. Sharaf and E. Alsaggaf, "Environmental Adaptation For Autistic Children Using Virtual Reality", Proceedings Of Virtual Reality International Conference (Vric), S. Richir Ed, 20-22 March, Laval, France, Publisher: Laval Virtual, Wwv.Laval-Virtual.Com, Isbn 978-2-9566251-2-4., 2019.
22. Enas Turki, Dr. Adnan Al-Bar, and Dr. Sanaa Sharaf, "Framework For Securing Mobile Application", 4th International Conference On Software Security November 24-25, 2018, Melbourne, Australia, 2018.
23. S. Sharaf, K. Djemame, "Enabling Service-Level Agreement Renegotiation Through Extending Ws-Agreement Specification", Service Oriented Computing And Applications, vol: 9, pp. 177-191, 2014.  
DOI: [10.1007/s11761-014-0159-5](https://doi.org/10.1007/s11761-014-0159-5)
24. S. Sharaf and K. Djemame, "Extending Ws-Agreement To Support Grid Service Level Agreements Renegotiation", Saudi Scientific International Conference, Brunel, Uk, October 2012., 2012.
25. S. Sharaf and K. Djemame, "Dynamic Grid Sla Through Extending Ws-Agreement", Saudi International Conference, Manchester, Uk, July 2010, 2010.
26. S. Sharaf and K. Djemame, "Extending Ws-Agreement To Support Re-Negotiation Of Dynamic Grid Slas.", Proceedings Of Echallenges 2010, Warsaw, Poland, October 2010, 2010.
27. S. Sharaf and K. Djemame, "An Application Of Dynamic Service Level Agreements In A Risk-Aware Grid Environment", International Conference On Grid Computing And Applications (Gca'2009), Las Vegas, Nevada, July 2009, 2009.