Curriculum vitae

Name: Asgarali Bouyer

Degree: Doctor of philosophy (PhD)

Position: Associated. Prof

Program: Computer Science and Information Systems

Date of Birth: 03th September 1979

Nationality: Iranian

Email: phdutm2009@gmail.com, a.bouyer@azaruniv.ac.ir

Mobile Tel: +989024006448

Asgarali Bouyer is an Associate Professor in the Faculty of Computer engineering and information technology at Azarbaijan Shahid Madani University. He received the Ph.D degree in Computer Science from Universiti Teknologi Malaysia (UTM), Malaysia in 2011. His current research interests are in complex network and social media mining, data mining and spectral clustering.

Achievements

Published Journal papers

1. Bouyer, Asgarali, et al. "FIP: A fast overlapping community-based Influence Maximization Algorithm using probability coefficient of global diffusion in social networks." Expert Systems with Applications (2022): 118869.
2. Roghani, Hamid, and Asgarali Bouyer. "A Fast Local Balanced Label Diffusion Algorithm for Community Detection in Social Networks." IEEE Transactions on Knowledge and Data Engineering (2022).
3. Bouyer, Asgarali, and Hamid Ahmadi Beni. "Influence maximization problem by leveraging the local traveling and node labeling method for discovering most influential nodes in social networks." Physica A: Statistical Mechanics and its Applications 592 (2022): 126841.
4. Arasteh, Bahman, Mohammad Abdi, and Asgarali Bouyer. "Program source code comprehension by module clustering using combination of discretized gray wolf and genetic algorithms." Advances in Engineering Software 173 (2022): 103252.
5. Zarezadeh, Mahdi, Esmaeil Nourani, and Asgarali Bouyer. "DPNLP: distance based peripheral nodes label propagation algorithm for community detection in social networks." World Wide Web 25.1 (2022): 73-98.
6. Aghaalizadeh, Saeid, Saeid Taghavi, **Asgarali Bouyer**, and Babak Anari. "Improving the stability of label propagation algorithm by propagating from low-significance nodes for community detection in social networks." Computing 104.1 (2022): 21-42.
7. Bouyer, Asgarali, Khatereh Azad, and Alireza Rouhi. "A fast community detection algorithm using a local and multi-level label diffusion method in social networks." International Journal of General Systems 51.4 (2022): 352-385.
8. Noshad, Zahra, Asgarali Bouyera, and Mohammad Noshad. "Mutual information-based recommender system using autoencoder." Applied Soft Computing (2021): 107547.
9. Ahmadi Beni, Hamid, and Asgarali Bouyer. "Identifying influential nodes using a shell-based ranking and filtering method in social networks." Big Data 9.3 (2021): 219-232.
10. Aghaee, Zahra, et al. "A survey on meta-heuristic algorithms for the influence maximization problem in the social networks." Computing 103.11 (2021): 2437-2477.
11. Roghani, Hamid, Asgarali Bouyer, and Esmaeil Nourani. "PLDLS: A Novel Parallel Label Diffusion and Label Selection-based Community Detection Algorithm Based on Spark in Social Networks." Expert Systems with Applications (2021): 115377.
12. Bouyer, Asgarali, and Hamid Roghani. "LSMD: A fast and robust local community detection starting from low degree nodes in social networks." Future Generation Computer Systems 113 (2020): 41-57.
13. Bouyer, Asgarali, and Hamid Ahmadi. "A greedy new method based on the cascade model to calculate maximizing penetration in social networks." Journal of Information and Communication Technology 37.37 (2020): 85.

14. Bouyer, Asgarali, and Somayeh Norouzi. "Sampling from social networks's graph based on topological properties and bee colony algorithm." Signal and Data Processing 17.3 (2020): 55-70.

15. Bouyer, Asgarali, and Mojtaba Zirak. "Digital forensics in private Seafile cloud storage from both client and server side." International Journal of Electronic Security and Digital Forensics 13.3 (2021): 233-267.

16. Aghaalizadeh, Saeid, Saeid Taghavi Afshord, Asgarali Bouyer, and Babak Anari. "A three-stage algorithm for local community detection based on the high node importance ranking in social networks." Physica A: Statistical Mechanics and its Applications 563 (2021): 125420.

17. Zarezade, M., E. Nourani, and Asgarali Bouyer. "Community detection using a new node scoring and synchronous label updating of boundary nodes in social networks." Journal of AI and Data Mining 8.2 (2020): 201-212.

18. Sona Taheri, Asgarali Bouyer, Community Detection in Social Networks Using Affinity Propagation with Adaptive Similarity Matrix, Big Data journal, .liebertpub, Published online in 1 Jun 2020(https://doi.org/10.1089/big.2019.0143), IF(JCR): 2.106.

19. Hamid Ahmadi Beni, Asgarali Bouyer, TI-SC: Top-k influential nodes selection based on community detection and scoring criteria in social networks, Journal Journal of Ambient Intelligence and Humanized Computing, Springer, 2020, . IF(JCR): 1.91.

20. Berahmand K, Bouyer A, Samadi N. *A new local and multidimensional ranking measure to detect spreaders in social networks.* Computing. (2019); 101(11): 1711-33. IF(JCR): 2.063

21. Nasiri E, Bouyer A, Nourani E. *A node representation learning approach for link prediction in social networks using game theory and K-core decomposition.* The European Physical Journal B. 2019 Oct 1;92(10):228. IF(JCR): 1.44

22. Berahmand K, Bouyer A. *A Link-Based Similarity for Improving Community Detection Based on Label Propagation Algorithm.* Journal of Systems Science and Complexity. 2019 1;32(3):737-58. IF(JCR): 0.939

23. Berahmand K, Bouyer A, Vasighi M. *Community Detection in Complex Networks by Detecting and Expanding Core Nodes Through Extended Local Similarity of Nodes.* IEEE Transactions on Computational Social Systems. 2018 Dec 7;5(4):1021-33.

24. Jalali M, Bouyer A. *Exploring the relationship of university students' educational variables and the degree of their use of virtual social networks.* Information Discovery and Delivery. 2019 . IF(JCR): 0.55

25. Asgarali Bouyer, and Abdolreza Hatamlou. *"An efficient hybrid clustering method based on improved cuckoo optimization and modified particle swarm optimization algorithms."* Applied Soft Computing 67 (2018): 172-182. IF(JCR): 4.873

26. Samadi, Negin, and Asgarali Bouyer. *"Identifying influential spreaders based on edge ratio and neighborhood diversity measures in complex networks."* Computing (2019): 101 (08): 1147-1175 IF(JCR): 2.063

27. Berahmand, Kamal, Asgarali Bouyer, and Negin Samadi. *"A new centrality measure based on the negative and positive effects of clustering coefficient for identifying influential spreaders in complex networks."* Chaos, Solitons & Fractals 110 (2018): 41-54. IF(JCR): 3.064

28. Berahmand, Kamal, and Asgarali Bouyer. *"LP-LPA: A link influence-based label propagation algorithm for discovering community structures in*

networks." International Journal of Modern Physics B 32.06 (2018): 1850062. IF(JCR): 0.863

29. Asgarali Bouyer, *Breast Cancer Diagnosis Using Data Mining Methods, Cumulative Histogram Features, and Garylevelco-Occurrence Matrix, Journal of Current Medical Imaging Reviews*, Bentham Science Blishers Ltd. 13(4). 2017. IF(JCR): 0.69

30. Asgarali Bouyer, Habib Ghafarzadeh, *An efficient hybrid clustering method using an artificial bee colony algorithm and Mantegna Lévy distribution,* International Journal on Artificial Intelligence Tools (IJAIT), 17(2), pp: 1550034-1- 1550034-17, *2016*. IF(JCR): 0.778

31. Mahdi Abdollahi, Asgarali Bouyer,Davoud Abdollahi, *Improved cuckoo optimization algorithm for solving systems of nonlinear equations*, Journal of SuperComputing, 72(3), pp:1246–1269, *2016*. IF(JCR): 1.326

32. Bahman Arasteh · Asgarali Bouyer · Sajjad Pirahesh, *An efficient vulnerability-driven method for hardening a program against soft-error using genetic algorithm,* Journal of Computers & Electrical Engineering , 48(2015), pp: 25-43, Elsevier, *2015*. IF(JCR): 1.57

33. Asgarali Bouyer, Bahman Arasteh, An Adaptable job submission system based on moderate Price-adjusting policy in market-based grids, Journal of Wireless Personal Communications, 73(4), pp:1573–1590, springer, 2013. IF(JCR): 0.979.

34. Asgarali Bouyer, Habib Ghafarzadeh, Omid Tarkhaneh, An efficient hybrid algorithm using cuckoo search and differential evolution for data clustering, Indian Journal of Science & Technology, 8(24), pp:1-12, ISI& Scopus, 2016.

35. Asgarali Bouyer, *Load Balancing in Decentralized Grid scheduling systems using bee colony algorithm.* International Journal of Control and Automation, Vol. 9 (6) , Scopus (SJR:0.187).

36. Asgarali Bouyer, An Optimized K-Harmonic Means Algorithm Combined With Modified Particle Swarm Optimization And Cuckoo Search Algorithm, Journal of Foundations of Computing and Decision Sciences, 41(2), pp:99-121, ISI& Scopus, *2016*.

37. Asgarali Bouyer, A new Cost-Effective Model for Dynamic Pricing of Cloud Services based on Customer Demand Prediction, Journal of Next Generation Information Technology(JNIT), 7(3), PP:38-46, Scopus & IET, 2016.

38. Asgarali Bouyer, Abdolreza Hatamlou, Hybridization of LEACH Protocol with Penalized Fuzzy C-Means and Self Organization Map algorithms for Decreasing Energy in Wireless Sensor Networks, International Journal of Business Data Communications and Networking, 10(3), pp:46-64, IGI Global, ISI & Scopus, 2015.

39. Asgarali Bouyer, Abdolreza Hatamlou, Mohammad Masdari, A New Approach for Decreasing Energy in Wireless Sensor Networks with Hybrid LEACH Protocol and Fuzzy C-Means Algorithm, International Journal of

Communication Networks and Distributed Systems, 14(4), pp:400–412, Inderscience, Scopus & ACM, 2015.

40. Asgarali Bouyer, "Resource Discovery and Selection Service based on Optimized Inflation in Market-oriented Cloud Computing Environment", Journal of Convergence Information Technology, 9(3), Scopus & IET, pp: 76 - 85, 2014.

41. Asgarali Bouyer, A Reliable and Fault Tolerant Job Scheduling System in Market-based Grids Using Case-based reasoning method. International Journal of Modeling and Optimization, 3(3), IET & EI &DBLP, pp: 261-265, 2013.

42. Reza Poorzare, Shahram Jamali, Asgarali Bouyer, "New Area in Optical communication: Optical Burst Switching (OBS) Networks", Journal of Emerging Trends & Technology in Computer Science, Vol. 3 (1), pp:270-274, 2014.

43. Asgarali Bouyer, Bahman Arasteh, Firouz Nasrollahi, Maximizing job submission rate in market-oriented grids, Global Journal on Technology, 3(1), pp: 1877-1885, 2013.

44. Asgarali Bouyer, A new approach for evaluating the virtual education of students using association rule-mining in cloud computing environments, Global Journal of Computer Science, Vol. 1 (1), 2013.

45. Mansour Jalali, Asgarali Bouyer., et al., The Effect of Cloud Computing Technology in Personalization and Education Improvements and its Challenges. Procedia - Social and Behavioral Sciences, 83(0): p. 655-658, 2013.

46. Asgarali Bouyer, et al., Developing a Rule-Based Data Clustering Algorithm for Diagnosing of Wheat Pest. Global Journal on Technology, 3(1): p. 1549-1555, 2013.

47. *Asgarali Bouyer, Abdul Hanan Abdullah, A well-managed QoS-Based Job Scheduling System Using Cooperative and Localization Policy in Market-Oriented Grids, Journal of Scientific Research and Essays, 6(17): p. 3729-3750; JCR (in 2010) 0.445,* **2011**.

48. Asgarali Bouyer, A new approach for evaluating the virtual education of students using association rule-mining in cloud computing environments. Global Journal of Computer Sciences, 1(1): p. 01-06, 2011.

49. Asgarali Bouyer, Abdul Hanan Abdullah, Fault-Tolerant Meta-Scheduler for Price-based Job Scheduling by Applying Multi- Reservation Method. Journal of Digital Information Management (JDIM), 8(3): p. 12, 2010.

50. Asgarali Bouyer, A. Hatamlou, and A.H. Abdullah, An Optimized Clustering Algorithm Using Genetic Algorithm and Rough set Theory based on Kohonen self-organizing map. International Journal of Computer Science and Information Security (IJCSIS), 8(4): p. 39-44, ISI, 2010.

51. Asgarali Bouyer, A.H. Abdullah, and M.j. Hoseyni, Improving overhead computation and pre-processing times for grid scheduling system. International

Journal of Computer Science and Information Security, 8(1): p. 27-34, ISI, 2010.

52. Asgarali Bouyer, M. Karimi, et al., A new Approach for Selecting Best Resources Nodes by Using Fuzzy Decision Tree in Grid Resource Broker. International Journal of Grid and Distributed Computing, Vol(1)(1): p. 49-62, EI-Compendex & DBLP, 2008.

53. Asgarali Bouyer, Mohd Noor Md Sap, A predictive approach to improve a fault tolerance confidence level on grid resources scheduling. Jurnal Teknologi Maklumat, 20(3): pp:28-41, Scopus, 2008,

54. Hakimeh Alemi Baktash, Mohammadbagher Karimi, Asgarali Bouyer, Mohammadreza Meybodi, A new access control framework in Grid Environments, Journal of Networking Technology, 2(1), pp: 36-43, 2011.

Book chapter Papers

55. Bouyer, A. and M.S. Mohd Noor, *A Mining-Based Approach For Selecting Best Resources* Nodes *on Grid Resource Broker*, (**Book title: *Advances in Artificial Intelligence Applications***). 2008, FSKSM,UTM. pp. 102-125.

56. Bouyer, A., M. Karimi, and M. Jalali, *An Online and Predictive Method for Grid Scheduling Based on Data Mining and Rough Set*, (**Book title: *Computational Science and Its Applications*): Part I**. 2009, Springer-Verlag, pp. 775–787.

57. Bouyer, A. and S.M. Mousavi, *A Predictive Approach for Selecting Suitable Computing Nodes in Grid Environment by Using Data Mining Technique*, (**Book title: *Advances in Computational Science and Engineering*).** 2009, Springer-Verlag Berlin Heidelberg. pp. 190-205.

International Conference

1. Beni, Hamid Ahmadi, Zahra Aghaaei, Asgarali Bouyer. "IMT: selection of top-k nodes based on the topology structure in social networks." 2020 6th International Conference on Web Research (ICWR). IEEE, 2020.

2. Beni, Hamid Ahmadi, Sevda Azimi, and Asgarali Bouyer. "A node filtering approach for Influence Maximization problem in Independent Cascade model." 2020 6th Iranian Conference on Signal Processing and Intelligent Systems (ICSPIS). IEEE, 2020.

3. Maryam SamanAzari, Asgarali Bouyer, Naser FarajZadeh, Service composition with knowledge of quality in the cloud Environment using the cuckoo optimization and artificial bee colony algorithms, 2015 2nd International Conference on Knowledge-Based Engineering and Innovation (KBEI), 2015, Tehran

4. Asgarali Bouyer, Bahman Arasteh. An Economic Model for Dynamic Pricing of Cloud Services based on Customer Demand forecasting using Bayesian

Vector Auto Regression, The 13th Annual Research Conference on Advancement in Business, Science and Technology, 2014.

5. Bahman Arasteh, Asgarali Bouyer, Sajjad Pirahesh. A New Method to Develop Reliable and Efficient Software with a limited cost., The 13th Annual Research Conference on Advancement in Business, Science and Technology, 2014.

6. Asgarali Bouyer, Bahman Arasteh. "The necessity of using cloud computing in educational system", 3rd Cyprus International Conference on Educational Research, 2013, North Cyprus**.**

7. Alireza Firuzbakht, Asgarali Bouyer. An optimal Algorithm based on gridding and clustering for decrease energy consumption in WSN. in Information & Communication Technology Electronics & Microelectronics (MIPRO), 2013 36th International Convention on. 2013.

8. Bahman arasteh, Asgarali Bouyer, Mohammad Javad Hosseini, A Reliable Architecture for Grid Resource Management System with Low Degree of Redundancy and Overhead. Second World Conference On Information Technology (WCIT), 2011, Turkey.

9. Bahman Arasteh, Asgarali Bouyer, and A.J. Mansour Jalali, Saiid Saiidvand An Efficient Service Oriented Model for Pervasive and Reliable E-learning Applications in the Grid. in 2nd World Conference On Educational Technology Researches (WCETR), 2012. Cyprus.

10. Asgarali Bouyer, A.H. Abdullah, and M.J. Hoseyni. The detection of new impact parameters for price-adjusting and allocation in market-based grids. in New Trends in Information Science and Service Science (NISS), 2010 4th International Conference on. 2010.

11. Asgarali Bouyer, E. Mohebi, and M. Karimi. An Efficient Clustering of the SOM using Rough set and Genetic Algorithm. in 5th IEEE-GCC 2009. 2009. Kuwait: IEEE Computer Society.

12. Asgarali Bouyer, A.H. Abdullah, et al. Fault-Tolerance Scheduling by Using Rough Set Based Multi-checkpointing on Economic Grids. in Computational Science and Engineering, 2009. CSE '09. International Conference on. 2009. Vancouver, Canada: IEEE Computer Society.

13. Asgarali Bouyer and A.H. Abdullah, GNM: A Grid Node's Module for partitioned grid scheduling system based on hierarchical model, in 2nd Postgraduate Annual Research Symposium (PARS06). 2010, Universiti Teknologi Malaysia: Malaysia. p. 8.

14. Asgarali Bouyer, M.b. Karimi, et al. A Learning-based Approach for Fault Tolerance on Grid Resources Scheduling. in 5th IEEEGCC International conference. March 2009. Kuwait: IEEE.

15. Asgarali Bouyer, A.H. Abdullah, et al. Minimizing Overhead Computation Time for Grid Scheduling System Based on Partitioned Grid Information Service in the Second International Conference on Network Applications, Protocols and Services (NETAPPS2010). 2010. Malaysia: IEEE-CPS.

16. Asgarali Bouyer, B. Arasteh, et al. A New and Optimal Architecture for Applying Association Rule Mining Algorithms on Grid. in IADIS European Conference on Data Mining 2007. 2007. Lisbon, Portugal: IADIS

17. Asgarali Bouyer, B. Arasteh, and A. Movaghar, A new Hybrid Model using Case-Based Reasoning and Decision Tree Methods for improving Speedup and Accuracy, in 4th Iadis International Conference Applied Computing 2007. 2007: Spain. p. 787-789.

18. Asgarali Bouyer, M. Noor, and A.H. Abdullah. A new rough set based approach for optimized detection of available resources in Grid computing. in Information and Communication Technologies, 2009. ICICT '09. International Conference on. 2009. Karachi, Pakistan: IEEE Computer Society.
19. Asgarali Bouyer, A.H. Abdullah, and M.S. Mohdnoor. Using Rough Set based Multi- Checkpointing for Fault- Tolerance Scheduling in Economic Grids. in First International Conference on 'Networked Digital Technologies(NDT 2009) 29-31 Jul. 2009 Ostrava , Czech Republic: IEEE.
20. Asgarali Bouyer, E. Mohebi, and A. Abdul Hanan, Using Self-Announcer Approach for Resource Availability Detection in Grid Environment, in Proceedings of the 2009 Fourth International Multi-Conference on Computing in the Global Information Technology. 2009, IEEE Computer Society: Cannes, La Bocca , France. p. 151-156.
21. Baktash, H.A., A. Bouyer, et al. 2L-RBACG: A New Framework for Resource Access Control in Grid Environments. in Fifth International Conference on Digital Information Management (ICDIM). 2010. Lakehead University, Thunder Bay, Canada.
22. Asgarali Bouyer, and A. Abdul Hanan, A reliable and Fault Tolerant job scheduling system in market-based grids using Case-based reasoning method, in 2010 International Conference on Computer and Software Modeling (ICCSM 2010), Indexed by IEEE Xplore, Ei Compendex, ISI Proceeding. Dec 2010, Manila, Philippine. P. 147-152.

Published Papers in National Conferences

1. Hamid roghani, Asgarali Bouyer. A New Multi Factor Node Scoring Based Label Propagation Algorithm For Community Detection, 7th National and First International Conference on Distributed Computing and Big Data Processing (DCBDP2022), 11 May 2022.
2. Asgarali Bouyer.An efficient preprocessing method for influence maximization problem in complex networks, 6th National Conference on Distributed Computing and Big Data Processing (DCBDP2020), 03 March 2021.
3. Hamid Ahmadi Beni, Asgarali Bouyer. An efficient percolation-based method for influence maximization problem, 6th National Conference on Distributed Computing and Big Data Processing (DCBDP2020), 03 March 2021.
4. Hadi Farrashzadeh, Asgarali Bouyer, Optimizing Task Scheduling using cuckoo search algorithm in cloud computing, 1st national conference on distribute computing and big data processing(DCBDP), Tabriz, Iran,2015.
5. Published two papers in proceeding of national conference in Malaysia (PARS09, PARS 06),. (Title of paper: A Prediction-based Fault Tolerance on Grid Resources scheduling by using Optimized Case-based Reasoning), 2009.
6. Asgarali Bouyer, Pezhman rasoul ahari, DFDC: Distributed Fault Detection Method in Clustered Wireless Sensor Networks, 2th Extending Industrial Applications of Information, Communications and Computations (EIAICC) 2013, Tabriz.

Research Projects

1. Asgarali Bouyer, Mansour Jalali. Diagnosing the Wheat Pest using data mining techniques, completed and defended in 2014.

2. Asgarali Bouyer, Clustering the outlier data using an improved K-harmonic mean algorithm (Persian title: ارائه یک روش بهبود یافته بر خوشه بندی داده های دارای داده پرت با الگوریتم بهینه شده میانگین هارمونیک (K), completed and defended in 2015.

Awards

1- Selection as the best Iranian researcher by the Embassy of the Islamic Republic of Iran in 2010-2011 and also by the University of Technology of Malaysia among foreign computer students.

2- election as the best researcher of the Faculty of Information Technology and Computer Engineering at Azerbaijan Shahid Madani University in 2020

3- Selection as the best researcher of the Faculty of Information Technology and Computer Engineering at Azerbaijan Shahid Madani University in 2018

4- Selection as the best researcher of the Faculty of Information Technology and Computer Engineering at Azerbaijan Shahid Madani University in 2016

5- Selection as the best researcher of the Faculty of Information Technology and Computer Engineering at Azerbaijan Shahid Madani University in 2014.