

## **kamran Zamanifar**

5520 Owensmouth Ave, Unit 309  
Woodland Hills, Los Angeles USA 91367  
8188621214  
zamanifar@hotmail.com

### **PROFESSIONAL AFFILIATIONS**

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Computer science university professor with more than 25 years of experience teaching and research at several prestigious and well-known universities. Distinguished record of publication in prestige academic journals all over the world. Commitment to helping university students develop their full potential in their studies. Accept the responsibility of being a supervisor for master and doctoral students. Ability to accept the management of research projects. Strong philosophy of teaching, and knowledge of many different methods to motivate students to develop their expertise in specific areas. Dedicated partner to university programs and outreach events that help promote learning and support the community. My Google scholar (number of citations) is 1536, h-index is 20, and i10-index is 42.

### **EDUCATION**

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<b>University of Leeds, School of Computer Science</b> Leeds, Yorkshire UK Ph.D. in Parallel and Distributed Computing, GPA: best	1992 - 1996
<b>University of Tehran, Faculty of Engineering</b> Tehran Iran MSc in Electronic Engineering, GPA: best	1982 - 1984
<b>University of Tehran, Faculty of Engineering</b> Tehran Iran BSc in Electrical and Electronic Engineering, GPA: best	1976 - 1982

### **WORK EXPERIENCE**

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<b>California State University Northridge</b> , Northridge, California USA <i>Part time Professor</i>	12/2020 - Present
<b>University of Isfahan, Faculty of Computer Engineering</b> , Isfahan Iran <i>Professor</i> full time	01/1996 - 09/2020
<b>University of California, UCI</b> , Irvine, California USA <i>Visiting Professor</i>	07/2017 - 09/2017
<b>University of California, UCI</b> , Irvine, California USA <i>Visiting Professor</i>	07/2016 - 09/2016

### **SKILLS- COURSES DEVELOPED AND TAUGHT**

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- 1- Operating Systems
- 2- Introduction to Algorithms and Programming

- 3- Programming in Java
- 4- Programming in Object Oriented Languages
- 5- Concepts of Programming Languages
- 6- Compilers
- 7- Data Structures
- 8- Design and Analysis of Algorithms
- 9- Artificial Intelligence
- 10- Software Engineering
- 11- Design and Analysis of Parallel Algorithms (Parallel Computing)
- 12- Parallel and Distributed Programming
- 13- Advanced Operating Systems
- 14- Distributed Systems
- 15- Design and Analysis of Advanced Algorithms
- 16- Evolutionary Computing
- 17- Cloud Computing
- 18- Internet of Things
- 19- Pervasive Computing
- 20- Embedded System Design
- 21- Seminar

## **FIELD OF RESEARCH**

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- 1- Parallel and Distributed Systems
- 2- Big Data
- 3- Operating Systems
- 4- Soft Computing
- 5- Grid Computing
- 6- Cloud Computing
- 7- Pervasive Computing (IoT)
- 8- Embedded Systems
- 8- Social Networks

I have done many projects with Iran's domestic industries as follows:

Isfahan Steel Company, Isfahan Iron Melting Company, Isfahan University of Technology, Isfahan Electricity Company, Isfahan University of Medical Sciences, Isfahan Municipality Center, Iran Telecommunication Research Center, and etc.

## **PUBLICATIONS**

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### **Published Books**

- 1- Parallel Computing, 2020, published by Azad University.
- 2- Evolutionary Computing, 2021, Isfahan Technical University.
- 3- *The Principles of Concurrent Programming*, 2010, published by the University of Isfahan . Second edition 2016.
- 4- *Operating Systems Security*, 2016, published by Nibag Ltd.

- 5- *Parallel Programming, step by step*, 2014, published by Amokhteh Ltd.
- 6- *The Principles of Operating System Design using Schaum's Directory*, 2008, published by Dibagaran Ltd.
- 7- *Transistor Circuit Design*, 1985, published by Amir kabir Ltd.
- 8- *Transistor Circuit Approximations*, 1986 published by Iran Ershad Ltd.

### **Selected published journal papers**

*Reduce energy consumption by intelligent decision making in a fog-cloud environment.*  
Mohamed Abdolkhalegh, Kamran Zamanifar. Sep 2023. <https://doi.org/10.1007/s11277-023-10707-7>. Wireless Personal Communications.

*Type-2 fuzzy ontology-based semantic knowledge for indoor air quality assessment.*  
Abolfazl Ghorbani, Kamran Zamanifar. Volume 121, 2022, Applied Soft Computing.

*Decentralized edge-to-cloud load balancing: service placement for the Internet of Things.*  
Zeinab Nezami, Karim Dijemame, Evangelos Pournavas. Volume 9. 2021, IEEE Access

*A two-phase virtual machine placement policy for data-intensive applications in cloud.*  
Samaneh Sadegh, Kamran Zamanifar, Piotr Kasprzak, Ramin Yahyapour. 2021, Journal of Network and Computer Application

*CaaSSET: a framework for model-driven development of context as a service.*  
Hossain Moradi, Bahman Zamani, Kamran Zamanifar. 2019, Future Generation Computer Systems.

*Assessing information diffusion models for influence maximization in signed social networks.* Maryam Hosseini-Pozveh, Kamran Zamanifar, Ahmad Reza Naghsh-Nilchi. 2019, Journal of Expert Systems with Applications, pp. 476-490.

*Efficient deadline-aware scheduling for the analysis of Big Data streams in public Cloud.*  
Mahmood Mortazavi-Dehkordi, Kamran Zamanifar. 2019, Cluster Computing, pp. 1-23.

*Efficient resource scheduling for the analysis of Big Data streams.* Mahmood Mortazavi-Dehkordi, Kamran Zamanifar. 2019, Intelligent Data Analysis, pp. 77-102.

*Internet of Things/Internet of Everything: Structure and ingredients.* Zeinab Nezami and Kamran Zamanifar. 2019, IEEE Potentials, pp. 12-17.

*Composing scientific collaborations based on scholars' rank in hypergraph.* Fahimeh Ghasemian, Kamran Zamanifar, Nasser Ghasem-Aghaee. 2019, Information System Frontiers, pp. 687-702.

*A cascade information diffusion based label propagation algorithm for community detection in*

*dynamic social networks*. Mohammad Sattari, Kamran Zamanifar. 2018, Journal of Computational Science, pp. 122-133.

*An evolutionary non-linear ranking algorithm for ranking scientific collaborations*. Fahimeh Ghasemian, Kamran Zamanifar, Nasser Ghasem-Aghaee. 2017, Applied Intelligence, pp. 1-18.

*A spreading activation-based label propagation algorithm for overlapping community detection in dynamic social networks*. Mohammad Sattari, Kamran Zamanifar. 2017, Data & Knowledge Engineering, pp. 1-25.

*A novel protocol in media access control for wireless body and network*. Zahra Mardani koorani, Kamran Zamanifar. 2017, International Journal of Computer Science and Network Security, vol 17, pp. 301-305.

*Toward a better scientific collaboration success prediction model through the feature space expansion*. Fahimeh Ghasemian, Kamran Zamanifar, Nasser Ghasem-Aghaee, Noshir Contractor. 2016, Scientometrics, pp. 1-28.

*Maximizing the spread of positive influence in signed social networks*. Maryam Hosseini-Pozveh, Kamran Zamanifar, Ahmad Reza Naghsh-Nilchi, Peter Dolog. 2016, Intelligent Data Analysis, pp. 199-218.

*A community-based approach to identify the most influence nodes in social networks*. Maryam Hosseini-Pozveh, Kamran Zamanifar, Ahmad Reza Naghsh-Nilchi. 2015, Journal of Information Science, pp. 1-17.

*Mvcc: An architectural pattern for developing context- aware framework*. Hossain Shams, Kamran Zamanifar. 2014, Procedia Computer Science, vol. 34, pp. 344-351.

*A new community-based context distribution approach for large-scale pervasive systems*. Hamed Vahdatnejad, Kamran Zamanifar, Naser Nematbakhsh. 2013, International Journal of Ad Hoc and Ubiquitous Computing , vol. 14, pp. 90-98.

*Design guidelines for rapid and simple context-aware mobile application development – an android case study*. Hossain Shams, Kamran Zamanifar. 2015, EAI Endorsed Transactions on context-awareness Systems and Applications, pp. 1-6.

*Adaptive team-based multi agent organization model: A case in rescue systems*. Afsaneh Fatemi, Kamran Zamani, Naser Nematbakhsh. 2011. International Journal of Computer Science and Information Technology, vol. 3, pp. 165-175.

*An adaptive service choreography approach based on ontology driven policy refinement*. Farhad Mardoukhi, Naser Nematbakhsh, Kamran Zamanifar. 2011, International Journal of Web and Semantic Technology, vol. 2, pp. 59-76.

*Capability-based task allocation in emergency-response environments: A coalition formation approach*. Afsaneh Fatemi, Kamran Zamanifar, Naser Nematbakhsh. 2013, Turkish Journal of Electrical Engineering & Computer Science, vol. 21, pp. 1166-1181.

*Context-aware middleware architecture for smart home environment.* Hamed Vahdat Nejad, Kamran Zamanifar, Naser Nematbakhsh. 2013, International Journal of Smart Home, vol. 7, pp. 77-86.

*DEC: Diversity-based energy aware clustering for heterogeneous sensor networks.* Hadi Tabatabaiee malazi, Kamran Zamanifar. 2012, Ad Hoc & Wireless Sensor Networks, 2012, vol. 17, pp. 53-72.

*Developing improved Greedy crossover to solve symmetric travelling salesman problem.* Hasan Esmkhan, Kamran Zamanifar. 2012, International Journal of Computer Science Issues, vol. 9, pp. 121-126.

*Developing programming tools to handle traveling salesman problem by the three object oriented languages.* Hasan Esmkhan, Kamran Zamanifar. 2014, Applied Computational Intelligence and Soft Computing, vol. 2014, pp. 1-16.

*Extending WS-CDL to support re-usability.* Farhad Mardoukhi, Naser Nemat Bakhsh, Kamran Zamanifar. 2011, International Journal on Web Service Computing, vol. 2, pp. 1-15.

*FED: Fuzzy event detection model for wireless networks.* Hadi Tabatabaiee, Kamran Zamanifar, Stefan Dolman. 2011, International Journal of Wireless and Mobile Networks, vol. 3, pp. 29-45.

*Gossip-based density estimation in dynamic heterogeneous wireless sensor networks.* Hadi Tabatabaiee, Kamran Zamanifar, Andre Protino, Stefan Dolman. 2014, International Journal of Autonomous and Adaptive Communication Systems, vol. 7, pp. 151-167.

*Improvement of harmony search algorithm by using statistical analysis.* Hadi Sarvari, Kamran Zamanifar. 2011, Artificial Intelligence Review, pp. 1-35.

*Intelligent continuous double auction method for service allocation in cloud computing.* Nima Farajian, Kamran Zamanifar. 2013, BRAIN, vol. 4, pp. 1-11.

*New approach to multi-level processor Scheduling.* Samaneh Hossaini, Kamran Zamanifar. 2010, International Journal of Artificial Intelligence Tools, vol. 19, pp. 335-346.

*OoS decomposition for service composition.* Farhad Mardoukhi, Naser Nematbakhsh, Kamran Zamanifar. 2013, Applied Soft Computing, pp. 3409-3421.

*The power of the ants on solving distributed constraints satisfaction problems.* Samaneh Hossaini semnani, Kamran Zamanifar. 2012, Applied Soft Computing, 2012, vol 12, pp. 640-651.

*Study of some recent crossover effects on speed and accuracy of genetic algorithms, using symmetric travelling salesman problem.* Hasan Esmkhan, Kamran Zamanifar. 2013, International Journal of Computer Applications, vol. 8, pp. 1-6.

*Design and Implementation of a Multi-Agent System for the Job Shop Scheduling Problem.* Laila Asadzadeh, Kamran Zamanifar. 2011, International Journal of Computer Science and Security, vol. 5. pp. 287-297.

*Ontology instant matching using distributed similarity measure.* Farinaz Alamian, Kamran

Zamanifar. 2011, International Review on Computer and Software, vol 6, pp. 462-472.

*A decentralized coalition formation among homogeneous agents*. Laila Khaloozadeh, Kamran Zamanifar, Naser Nematbakhsh. 2014, Journal of Theoretical and Applied Information Technology, vol. 22, pp 35-42.

### **Selected published conference papers**

*Ontology – based resource allocation for Internet of Things*, Zainab Nezami, Kamran Zamanifar. In the Proceedings of the International Conference on Advances in Production Management Systems, APMS 2019. Austin, USA, Sept 2019.

*A team – based organization model for adaptive multi -agent systems*, Afsaneh Fatemi, Kamran Zamanifar. In the proceedings of 3rd International Conference on Agents and Artificial Intelligence – ICAART- 2011. Rome, Italy, Jan 2011.

*Handling uncertainty in composite event detection*, Hadi Tabatabaiee, Kamran Zamanifar. In the Proceedings 23rd International Conference on Computer Applications in Industry and Engineering, CAINE-2010. Los Vegas, USA, Nov 2010.

*A self adaptive harmony search algorithm for engineering and reliability problems*, Hadi Sarvari, Kamran Zamanifar. In the proceedings of 2010 Second International Conference on Computational Intelligence, Modeling and Simulation. Bali, Indonesia, Sept 2010.

*Market-driven continuous double auction method for service allocation in cloud computing*, Nima Farajian, Kamran Zamanifar. In the Proceedings of IEEE International conference on advances in Computing, Communication and Control, ICAC3 2013, CCIS 361. Mumbai, India, Jan 2013.

*Effect of collaboration modelling approach on collaboration success prediction*, Fahime Ghasemian, Kamran Zamanifar. In Proceedings of SciTS 2015 Conference. Betesda, USA, 2015.

*A reuse distance based pre-copy approach to improve live migration of virtual machines*, Javanshir Farzin, Kamran Zamanifar. In Proceedings of 2nd IEEE International Conference on Parallel, Distributed and Grid Computing, PDGC 2012. Shimla, India, 2012.

*Phase optimization method for energy aware scheduling of virtual machines in cloud data centers*, Mohammad MoinTaheri, Kamran Zamanifar. In the Proceedings of 6th IEEE International Conference on Internet Technology and Secured Transactions. Abu Dhabi, Emirates, Dec 2011.

*Gossip- based density estimation in dynamic Heterogeneous sensor network*, Hadi Tabatabaiee, Kamran Zamanifar, Andre Protino. In the Proceedings of 7th IEEE International Wireless Communications and Mobile Computing IWCMC 2011. Istanbul, Turkey, 2011.

*A new approach to use concepts definitions for semantic relatedness measurement*, Ehsan Khoonsiavoosh, KAMRAN ZAMANIFAR. In the Proceedings of 24th Australia Joint Conference on Advances in Artificial Intelligence (AI 2011). Pert, Australia, Dec 2011.

#### **ADMINISTRATIVE DUTIES**

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- 1- The Head of computer engineering department of University of Esfahan (1997-1999).
- 2- The Head of MSc computer engineering department of Azad University, Najafabad Branch (2007-2011).
- 3- The founder and the financial director of Chehelsotoon Higher Education Institute.
- 4- The Head of board of trustees of Chehelsotoon Higher Education Institute.
- 5- Official computer expert.
- 6- Head of pervasive computing research group.

#### **HONORS AND AWARDS**

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*Overseas Research Student Awards* from University of London, September 1984.  
*The top researcher* in The Faculty of Engineering, University of Isfahan, 2002  
*Head of RoboCup Simulation League (UI-AI, BAM)*, Software Engineering. Department, University of Isfahan, awarded in *Padova (Italy)*, *Lisbon (Portugal)*, *Ozaka (Japan)*, *Beremen (Germany)*, *Suzhou (China)*, and *Atlanta (USA)* competitions, 2003-2008.