

Mohammad Shojafar (PhD)
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Google Scholar: <http://goo.gl/53jv5M>

OBJECTIVE

A highly resourceful, organized, and energetic computer and information technology scientist, with passion and ability to inspire and energize team members and organizations, with extensive experience in research, publications, and teaching, seeking a position within a world-class research and development organization, which focuses on the cutting edge solutions and delivers real world applications.

QUALIFICATION SUMMARY

- **PhD in Information Communication and Telecommunications with full-time research experience in distributed computing (Cloud Computing, Cloud Networking and Cloud Security). Gained expertise like:**
 - Design, implementation, and evaluation of energy-provisioning cloud-based (virtualized)/networked datacenters testbed. System modeling via computational intelligence methods, particularly mathematical optimization techniques such as KKT, workload anticipation techniques, and gradient based approaches, some AI methods, and some supervised learning (regression analysis) to address some of issues raised in Cloud data centers and cloud networkings.
 - **Cloudsim/Docker Cloud Computing Platform knowledge and hands-on experiences (C++/Java programming)**
 - **CVX/MOSEK/AMPL packages over MATLAB Platform knowledge and hands-on experiences**
 - **Docker and VMware software (Oracle VM Virtualbox)**
 - **SDN and Orchestrators (Mininet, OpenFlow, NetKit)**
 - **AMPL optimization package (MILP, KNITRO, Gurobi)**
- **Solid Research and development accomplishments, including:**
 - Mathematical and statistical modeling, and experimental analysis of latency problem in Datacenters
 - Overview and process Near 100 technical, experimental, and original research articles in prestigious venues such as INFOCOM, SIGCOMM and IEEE Transactions.
 - Being featured as author of popular articles in IEEE Xplore and Thomson Reuters
- **Strong leadership, communication, and collaboration skills, for instance:**
 - Research collaboration and authorship with more than four worldwide research labs and universities
 - Invited reviewers for more than 30 conferences and journals, student mentoring, research supervision
 - Directing more than 10 master students with their research and publications inside and outside my research lab (Italy and Iran)
 - **Fluent in English (IELTS AT: 6.5, GRE Q:730/800 and V:430/800)**
 - Industrial R&D Experience in Software programming and data analysis
- **Computer science lecturer with more than 4 years of experiences.**

ACCOMPLISHMENTS

Book

1. Gang Chen, Feng Liu, **M. Shojafar**, Fuzzy System and Data Mining, IOS Press, ISBN: 978-1-61499-618-7, pages 517, Vol. 281, April 2016. Available in <http://www.iospress.nl/book/fuzzy-system-and-data-mining/>

Selected Journal Publications

1. C. Canali, L. Chiaraviglio, R. Lancellotti, **M. Shojafar**, *Joint Minimization of the Energy Costs from Computing, Data Transmission, and Migrations in Cloud Data Centers*, **IEEE Transactions on Green Communications and Networking**, pp. 1-16, January 2018. **[JCR Class: Q1]**
2. M.M. Tajiki, **M. Shojafar**, S. Salsano, M. Conti, M. Singhal, *Joint Failure Recovery, Fault Prevention, and Energy-efficient Resource Management for Real-time SFC in Fog-supported SDN*, **Computer Networks**, **JCR IF 2016: 2.5**, Under Review, March 2018. **[JCR Class: Q1]**

3. S.N. Fallah, R.C. Deo, **M. Shojafar**, M. Conti and Sh. Shamshirband, *Computational intelligence approaches for energy load forecasting in smart energy management grids: state of the art, future challenges and research directions*, MDPI, **Energies**, [JCR IF 2016: 2.26](#), pp. 1-32, March 2018. **[JCR Class: Q2]**
4. L. Chiaraviglio, F. D'Andreagiovanni, R. Lancellotti, **M. Shojafar**, N. Blefari-Melazzi, C. Canali, *An Approach to Balance Maintenance Costs and Electricity Consumption in Cloud Data Centers*, **IEEE Transactions on Sustainable Computing**, in second review (minor), March 2018.
5. M.M. Tajiki, B. Akbari, **M. Shojafar**, N. Mokari, *Joint QoS and Congestion Control Based on Traffic Prediction in SDN*, MDPI, **Applied Sciences**, [JCR IF 2016: 1.7](#), Vol. 7, Iss. 12, 1265, pp. 1-15, December 2017.
6. P.G. Vineuza, Z. Pooranian, **M. Shojafar**, M. Conti, R. Buyya, *FOCAN: A Fog-supported Smart City Network Architecture for Management of Applications in the Internet of Everything Environments*, Elsevier, **JPDC**, [JCR IF 2016: 1.9](#), pp. 1-17, October 2017. **[JCR Class: Q1]**
7. H. Soleimani, S. Tomasin, T. Alizadeh, **M. Shojafar**, *Cluster-Head Based Feedback for Simplified Time Reversal Prefiltering in Ultra-wideband Systems*, Elsevier, **Physical Communications**, [JCR IF 2016: 1.5](#), Vol. 25, Iss. 1, pp. 100-109, December 2017. **[JCR Class: Q2]**
8. S.H. Hosseini Nazhad, **M. Shojafar**, Sh. Shamshirband, M. Conti, *An Efficient Routing Protocol for the QoS Support of Large-Scale MANETs*, Wiley, **International Journal of Communication Systems (IJCS)**, [JCR IF 2016: 1.06](#), Vol. 31, Iss. 1, January 2018.
9. R.W. Ahmad, A. Gani, S.H. Ab Hamid, **M. Shojafar**, et al., *A Survey on Energy Estimation and Power Modeling Schemes for Smart-phone Applications*, Wiley, **International Journal of Communication Systems (IJCS)**, [JCR IF 2016: 1.06](#), Vol. 30, Issue 11, July 2017.
10. E. Baccarelli, P.G. Vineuza, M. Scarpiniti, **M. Shojafar**, J. Abawajy, *Fog of Everything: energy-efficient networked computing architectures, research challenges, and a case study*, **IEEE Access**, [JCR IF 2016: 3.2](#), Vol. 5, 08 May 2017, pp. 9882-9910. **[JCR Class: Q1]**
11. **M. Shojafar**, Z. Pooranian, P.G.V. Naranjo, E. Baccarelli, *FLAPS: Bandwidth and Delay-efficient Distributed Data Searching in Fog-supported P2P Content Delivery Networks*, Springer, **Journal of Supercomputing (SUPE)**, [JCR IF 2016: 1.3](#), Vol. 73, Iss. 12, pp. 5239–5260, December 2017. **[JCR Class: Q2]**
12. H. Mostafaei, **M. Shojafar**, B. Zaher, M. Singhal, *Barrier Coverage of WSNs with the Imperialist Competitive Algorithm*, Springer, **Journal of Supercomputing (SUPE)**, [JCR IF 2016: 1.3](#), Vol. 73, Iss. 11, pp. 4957–4980, November 2017. **[JCR Class: Q2]**
13. M.M. Tajiki, S. Salsano, L. Chiaraviglio, **M. Shojafar**, B. Akbari, *Joint Energy Efficient and QoS-aware Path Allocation and VNF Placement for Service Function Chaining*, **IEEE Transactions on Network and Service Management**, [JCR IF 2016: 3.1](#), Under Review, January 2018. **[JCR Class: Q1]**
14. E. Baccarelli, P.G. Vinueza Naranjo, **M. Shojafar**, M. Scarpiniti, *Q*: Energy and delay-efficient dynamic queue management in TCP/IP virtualized data centers*, Elsevier, **Computer Communication**, [JCR IF 2016: 3.3](#), Vol. 102, pp. 89–106, 1 April 2017. **[JCR Class: Q1]**
15. P.G. Vineuza, **M. Shojafar**, H. Mostafaei, Z. Pooranian, E. Baccarelli, *P_SEP: A Prolong Stable Election Routing Algorithm for Energy-limited Heterogeneous Fog-supported Wireless Sensor Networks*, Springer, **Journal of Supercomputing (SUPE)**, [JCR IF 2016: 1.3](#), Vol. 73, Iss. 2, 2017, pp. 733–755. **[JCR Class: Q2]**
16. **M. Shojafar**, C. Canali, R. Lancellotti, J.H. Abawajy, *Adaptive Computing-plus-Communication Optimization Framework for Multimedia Processing in Cloud Systems*, **IEEE Transaction on Cloud Computing**, [JCR IF 2016: 1.6](#), Vol. PP, No. 99, pp. 1-14, October 2016. **[Acceptance rate=7%] [JCR Class: Q1]**
17. **M. Shojafar**, N. Cordeschi, E. Baccarelli, *Energy-efficient Adaptive Resource Management for Real-time Vehicular Cloud Services*, **IEEE Transaction on Cloud Computing**, [JCR IF 2016: 1.6](#), Vol. PP, No. 99, pp. 1-14, April 2016. **[Acceptance rate=7%] [JCR Class: Q1] [Most cited][112+ citations]**
18. E. Baccarelli, N. Cordeschi, A. Mei, M. Panella, **M. Shojafar**, J. Stefa, *Energy-efficient Dynamic Traffic Offloading and Reconfiguration of Networked Datacenters for Big Data Stream Mobile Computing: Review*,

- Challenges, and a Case Study*, **IEEE Network Magazine**, [JCR IF 2016: 7.2](#), Vol. 30, No 2, pp. 54-61, March 2016. **[JCR Class: Q1]**
19. S. Al-Janabi, I. Al-Shourbaji, **M. Shojafar**, Sh. Shamshirband, *Survey of main challenges (security and privacy) in wireless body area networks for healthcare applications*, **Elsevier**, Egyptian Informatics Journal, Volume 18, Issue 2, 2017, pp. 113–122.
 20. Z. Pooranian, **M. Shojafar**, J.H. Abawajy, A. Abraham, *An Efficient Meta-heuristic Algorithm for Grid Computing*, **Springer, Journal of Combinatorial Optimization (JOCO)**, [JCR IF 2016: 1.2](#), Vol. 30, No. 3, pp. 413-434, 2015.
 21. **M. Shojafar**, S. Javanmardi, S. Abolfazli, N. Cordeschi, *FUGE: A joint meta-heuristic approach to cloud job scheduling algorithm using fuzzy theory and a genetic method*, Springer, **Cluster Computing**, [JCR IF 2016: 2.1](#), Vol. 18, No. 2, pp. 829-844, June 2015. **[JCR Class: Q1]**
 22. H. Mostafaei, **M. Shojafar**, *A New Meta-heuristic Algorithm for Maximizing Lifetime of Wireless Sensor Networks*, Springer, **Wireless Personal Communications**, [JCR IF 2016: 0.95](#), Vol. 82, No. 2, pp. 723-742, May 2015.
 23. **M. Shojafar**, S. Abolfazli, H. Mostafaei, M. Singhal, *Improving Channel Assignment in Multi-Radio Wireless Mesh Networks with Learning Automata*, Springer, **Wireless Personal Communications**, [JCR IF 2016: 0.95](#), Vol. 82, No. 1, pp. 61-80, April 2015.
 24. N. Cordeschi, **M. Shojafar**, D. Amendola, E. Baccarelli, *Energy-efficient adaptive networked datacenters for the QoS support of real-time applications*, Springer, **Journal of Supercomputing (SUPE)**, [JCR IF 2016: 1.3](#), Vol. 71, Issue 2, pp. 448–478, February 2015. **[JCR Class: Q2]**
 25. N. Cordeschi, D. Amendola, **M. Shojafar**, E. Baccarelli, *Distributed and Adaptive Resource Management in Cloud-assisted Cognitive Radio Vehicular Access Networks with Hard Reliability Guarantees*, Elsevier, **Vehicular Communications**, [JCR IF 2016: 5.1](#), Vol. 2, Iss. 1, pp. 1–12, January 2015. **[JCR Class: Q1]**
 26. **M. Shojafar**, J.H. Abawajy, Z. Delkxah, A. Ahmadi, Z. Pooranian, A. Abraham, *An Efficient and Distributed file search in Unstructured Peer-to-Peer Networks*, Springer, **Peer-to-Peer networking and Applications**, [JCR IF 2016: 1.26](#), Vol. 8, No. 1, pp. 120-136, January 2015.
 27. S. Javanmardi, **M. Shojafar**, Sh. Shariatmadari, S.S. Ahrabi, *FRTRUST: a Fuzzy Reputation Based Model for Trust Management in Semantic P2P Grids*, Inderscience, **International Journal of Grid and Utility Computing**, Vol. 6, Iss. 1, pp. 57-66, January 2015.
 28. S. Javanmardi, **M. Shojafar**, M. Mosleh, Sh. Shariatmadari, J.H. Abawajy, *PGSW-OS: A novel approach for resource management in a semantic web operating system based on a P2P grid architecture*, Springer, **Journal of Supercomputing (SUPE)**, [JCR IF 2016: 1.3](#), Vol. 69, Issue 2, pp. 955-975, August 2014. **[JCR Class: Q2]**
 29. Z. Pooranian, **M. Shojafar**, B. Javadi, A. Abraham, *Using Imperialist Competition Algorithm for Independent Task Scheduling in Grid Computing*, IOS Press, **Journal of Intelligent and Fuzzy Systems**, [JCR IF 2016: 1.26](#), Vol. 27, No. 1, pp. 55-67, July 2014. **[JCR Class: Q2]**
 30. A. Ahmadi, **M. Shojafar**, S.F. Hajeforosh, M. Dehghan, M. Singhal, *An efficient routing algorithm to preserve k -coverage in wireless sensor networks*, Springer, **Journal of Supercomputing (SUPE)**, [JCR IF 2016: 1.3](#), Vol. 68, Iss. 2, pp. 599-623, May 2014. **[JCR Class: Q2]**
 31. N. Cordeschi, **M. Shojafar**, E. Baccarelli, *Energy-saving self-configuring networked data centers*, Elsevier, **Computer Networks**, [JCR IF 2016: 2.5](#), Vol. 57, Iss. 17, pp. 3479–3491, December 2013. **[JCR Class: Q1]**
 32. **M. Shojafar**, Z. Pooranian, M.R. Meybodi, M. Singhal, *ALATO: An Efficient Intelligent Algorithm for Time Optimization in an Economic Grid Based on Adaptive Stochastic Petri Net*, Springer, **Journal of Intelligent Manufacturing (JIMS)**, [JCR IF 2016: 3.1](#), Vol. 26, Iss. 4, pp. 641–658, August 2015. **[JCR Class: Q1]**
 33. Z. Pooranian, **M. Shojafar**, M. Singhal, A. Abraham, *Joint Genetic and Gravitational Emulation Local Search Algorithm for Independent Task Scheduling in Grid Computing*, **Informatica Journal** (Special Issue: Grid, Cloud and Sky Applications for Knowledge-based), Vol. 37, No. 2, pp.157-164, June 2013.

34. **M. Shojafar**, Z. Pooranian, J.H. Abawajy, M.R. Meybodi, *An Efficient Scheduling Method for Grid Systems Based on a Hierarchical Stochastic Petri Net*, Journal of Computing Science and Engineering (JCSE), Vol. 7, No. 1, pp. 44-52, March 2013.

Selected Conference Publications

1. M.M. Tajiki, S. Salsani, **M. Shojafar**, L. Chiaraviglio, B. Akbari, Energy-efficient Path Allocation Heuristic for Service Function Chaining, **21th ICIN**, France, pp.1-8, February 2018.
2. **M. Shojafar**, L. Chiaraviglio, N. Blefari-Melazzi, S. Salsano, *P5G: A Bio-inspired Algorithm for the Superfluid Management of 5G Networks*, **18th IEEE GLOBECOM**, Singapore, pp. 1-7, December 2017. (CORE: B, LiveSHINE: A, MA: A+)
3. Z. Pooranian, **M. Shojafar**, P.G. V. Naranjo, L. Chiaraviglio, M. Conti, *A Novel Distributed Fog-based Networked Architecture to Preserve Energy in Fog Data Centers*, **14th IEEE MASS**, Florida, USA, pp. 604-609, October 2017. (CORE: B, LiveSHINE: A, MA: B)
4. L. Chiaraviglio, **M. Shojafar**, et al., *Optimal Superfluid Management of 5G Networks*, **3rd NetSoft 2017**, Bologna, Italy, pp. 1-9, 2017.
5. C. Canali, R. Lancellotti, **M. Shojafar**, *A Computation- and Network-Aware Optimization Model to Reduce Energy Consumption in Cloud Data Centers*, **7th CLOSER 2017**, Porto, Portugal, pp. 71-81, April 2017. (LiveSHINE: C, MA: C)
6. **M. Shojafar**, C. Canali, R. Lancellotti, E. Baccarelli, *Minimizing Computing-plus-Communication Energy Consumptions in Virtualized Networked Data Centers*, **21th IEEE ISCC**, Messina, Italy, pp. 1137-1144, April 2016. (CORE: B, LiveSHINE: B, MA: B)
7. P.G.V. Naranjo, **M. Shojafar**, L. Vaca-Cardenas, C. Canali, R. Lancellotti, E. Baccarelli, *Big Data Over SmartGrid - A Fog Computing Perspective*, **24th IEEE SOFTCOM**, ICT Workshop, Split, Croatia, pp. 1-6, August 2016. (CORE: B, LiveSHINE: C)
8. P.G.V. Naranjo, **M. Shojafar**, A. Abraham, E. Baccarelli, *A New Stable Election-based Routing Algorithm to Preserve Aliveness and Energy in Fog-supported Wireless Sensor Networks*, **24th IEEE SMC**, Budapest, Hungary, pp. 002413-002418, June 2016. (CORE: B, LiveSHINE: B, MA: A++)
9. **M. Shojafar**, C. Canali, R. Lancellotti, S. Abolfazli, *An Energy-aware Scheduling Algorithm in DVFS-enabled Networked Data Centers*, **6th CLOSER**, Rome, Italy, Vol. 2, pp. 387-397, April 2016. [Best paper award nomination] (LiveSHINE: C, MA: C)
10. **M. Shojafar**, A.A.R Hosseinabadi, M. Kardgar, Sh. Shamshirband, *TETS: A Genetic-based Scheduler in Cloud Computing to Decrease Energy and Makespan*, **15th HIS**, Seoul, South Korea, pp. 103-115, September 2015. (CORE: C, LiveSHINE: B)
11. **M. Shojafar**, N. Cordeschi, J.H. Abawajy, E. Baccarelli, *Adaptive Energy-Efficient QoS-Aware Scheduling Algorithm for TCP/IP Mobile Cloud*, **16th IEEE GLOBECOM** in CCSNA WORKSHOP, San Diego, CA, USA, pp.1-6, December 2015. (CORE: B, LiveSHINE: A, MA: A+)
12. **M. Shojafar**, N. Cordeschi, D. Amendola, E. Baccarelli, *Energy-saving adaptive computing and traffic engineering for real-time-service data centers*, **22nd IEEE ICC** in CCSNA WORKSHOP, London, UK, pp. 1800-1806, June 2015. (CORE: B, LiveSHINE: A+, MA: A+)
13. Sh. Shamshirband, **M. Shojafar**, A.A.R. Hosseinabadi, A. Abraham, *A Solution for Multi-objective Commodity Vehicle Routing Problem by NSGA-II*, **14th IEEE HIS**, Kuwait, Kuwait, pp. 12-17, December 2014. (CORE: C, LiveSHINE: B)
14. A.A.R. Hosseinabadi, M. Kardgar, **M. Shojafar**, Sh. Shamshirband, A. Abraham, *GELS-GA: Hybrid Metaheuristic Algorithm for Solving Multiple Travelling Salesman Problem*, **14th IEEE ISDA**, Okinawa, Japan, pp. 76-81, December 2014. (CORE: C, LiveSHINE: B, MA: B)
15. N. Cordeschi, D. Amendola, **M. Shojafar**, E. Baccarelli, *Performance evaluation of primary-secondary reliable resource-management in vehicular networks*, **25th IEEE PIMRC**, Washington, DC, USA, pp. 959-964, September 2014. (CORE: B, LiveSHINE: A-, MA: A-)

16. Z. Pooranian, A. Harounabadi, **M. Shojafar**, J. Mirabedini, *Hybrid PSO for Independent Task scheduling in Grid Computing to Decrease Makespan*, 2nd ICFIT, Singapore, pp. 327-331, August 2011.
17. H. Omranpour, M. Ebadzadeh, S. Barzegar, **M. Shojafar**, *Distributed Coloring of the Graph Edges*, 7th IEEE CIS, UK, pp. 1-5, March 2008.

Book Chapters

1. **M. Shojafar**, N. Cordeschi, E. Baccarelli, *Resource scheduling for energy-aware reconfigurable Internet data centers*, **IGI GLOBAL**, Handbook of Research on Next-Generation High Performance Computing, pp. 21-46, 2016.
2. N. Cordeschi, **M. Shojafar**, D. Amendola, E. Baccarelli, *Energy-saving QoS resource management of virtualized networked data centers for Big Data Stream Computing*, Invited Book Chapter, **IGI GLOBAL**, pp. 122-155, June 2015.
3. S. Abolfazli, Z. Sanaei, M. H. Sanaei, **M. Shojafar**, A. Gani, *Mobile cloud computing: The-state-of-the-art, challenges, and future research*, Encyclopedia of Cloud Computing, **John Wiley & Sons**, Ltd, pp. 29-40, 2016.
4. **M. Shojafar**, Z. Pooranian, M. Shojafar, A. Abraham, *LLLA: New Efficient Channel Assignment Method in Wireless Mesh Networks*, **Springer**, Invited Book Chapter in Innovations in Bio-inspired Computing and Applications Advances in Intelligent Systems and Computing, Vol. 237, pp. 143-152, January 2014.

Technical Reports

1. **M. Shojafar**, *Convex/nonconvex programming examples*, Tech. Report, Optimization course, PhD period, Under Prof. F.C. Paola Loreti Supervision, Sep. 2014.
2. **M. Shojafar**, *MPI Programming For Clusters*, Tech. Report, Grid Computing course, Msc period, Under Dr. Bahman Javadi Supervision, Sep. 2008.
3. **M. Shojafar**, *Langton Ant and its Rules in Cellular Automata*, Tech. Report in Parallel Algorithm course, Msc period, Under Dr. M.R Meybodi Supervision, Jan. 2008.
4. **M. Shojafar**, *Moving Management for Multi Agent in Local Area*, Programming With Prolog Component In Delphi6.0, Algorithm Design course, Bsc period, Under Dr. M. Ebrahimi Moghadam, Sep 2004.

Theses

1. **M. Shojafar**, *Saving Energy in QoS Networked Data Centers*, Ph.D. Thesis, Faculty of DIET, Sapienza University of Rome, defend in **20th May 2016**. **Advisor: Professor E. Baccarelli**
2. **M. Shojafar**, *An Adaptive Stochastic Petri net model based on Learning Automata's and its application to Grid Computing*, Master Thesis, Faculty of Computer and Electrical Engineering, Qazvin Islamic Azad University (QIAU), September 2010. **Advisor: Professor M.R Meybodi**
3. **M. Shojafar**, *A Petri net model and Its Usage in WFMs Optimization*, Bachelor Thesis, Faculty of Computer Engineering, Iran University Science and Technology (IUST), December 2006. **Advisor: Dr. A.A Ghadiri**

PROFESSIONAL EXPERIENCES

Keynote Speaking

- | | |
|---|--------------|
| 2017 SPRITZ-CLUSIT Workshop on Future Systems Security and Privacy, Padua, Italy
Link: http://spritz.math.unipd.it/events/2017/EU-cybersecuritymonth-workshop/
Video: https://youtu.be/qdBnc_aCHBY | October 2017 |
| 2018 Next Generation Communications and Computing Networks (NEXTCON)
Research Laboratory, School of Electrical Engineering and Computer Science, University of Ottawa, Ottawa, Canada | March 2018 |
| 2018, 3 rd I2SBD2C 2018 (International Spring School of Big Data and Cloud Computing) | April 2018 |

Link: <http://www.i2sbd2c.tn/>

Research & Development Employments

- SPRITZ Security and Privacy Research Group, Department of Mathematics, University of Padova, Padova Italy
 Activities: Research & Development in Security monitoring and management of Network services and Distrusted systems and Resource management in SaaS multi-cloud (multimedia-cloud) systems. January 2018-Onward
- CNIT, Department of Electronic Engineering, University of Rome Tor Vergata, Rome Italy
 Technical member, in SUPERFLUIDITY project (Horizon 2020 European project)
 Activities: The SUPERFLUIDITY project tackles crucial shortcomings in today's networks: long provisioning times, with wasteful over-provisioning used to meet variable demand; reliance on rigid and cost-ineffective hardware devices; daunting complexity emerging from three forms of heterogeneity: heterogeneous traffic and sources; heterogeneous services and needs; and heterogeneous access technologies, with multi-vendor network components. My task is to propose technical solutions in monitoring and management of 5G networks and manage heterogeneous traffic using reinforcement algorithms such as ML, mathematical solutions, and meta heuristics methods. December 2016-January 2018
- Department of "Enzo Ferrari", University of Modena e Reggio Emilia, Modena Italy
 Technical member, in SAMMClouds project (Italian project)
 Activities: Research & Development in monitoring and management of IaaS cloud e multi-cloud systems and Resource management in SaaS multi-cloud (multimedia-cloud) systems. 2015-2016
- Wired Broadband Lab, University of Rome Italy
 Technical member,
 Activities: Research & Development in the areas of Cloud, Networked Data centers, and Vehicular Communications. Supervising junior research assistants and PG students. Publishing high impact articles 2012-2016
- Rahyab Rayaneh Gostar section, Tidewater Inc., Iran Iran
 Activities: Analytically and empirically investigating the impact of concurrency on software testers such as IBM Rational Robot and devising a model for concurrency problem. Analyzing and visualizing the results, and reporting them as an internal technical report to the company. Then, apply the proper software on GCOMS Project for Harbor Master & General Cargo for International Iran's Ports (Emam Khomeini, Shahid Rajeei, Shahid Bahonar, Anzali, and Noushahr), for error recovery in debugging unit of GCOMS. 2008-2009

Industry Employments

- Exploration Directorate section in National Iran Oil Company, IT Programmer/Engineer (*Full-time*) 2012-2013
Iran
 Responsibilities: Software Specialist/ Java Programmer, computer system engineer
- Sina Laboratory, Computer and Network Technician (*Part-time*) 2007-2011
 Responsibilities: Installing, configuring, and maintaining computer systems and networks Iran
 Addr.: Sina Lab., Babolsar, Mazandaran, Iran
- Rahyab Rayaneh Gostar Section in Tidewater ltd. Co., Software analyzer (*Full-time*) 2008-2009
 Responsibilities: Software Analyzer/programmer Iran
 Addr.: 1th Floor,#13,Fathi Shaghaghi str,Crossover Vali asr Ave. and Shahid Motahary str,Tehran, Tehran, Iran
- Shibkaran Construction co., Computer and Network Technician (*Part-time*) 2004-2006
 Responsibilities: Installing, configuring, and maintaining computer systems and networks Iran
 Addr.: Rahband,Sari, Mazandaran, Iran Tel: +981513233474
- Markazi Computer Institute, Lecturer and programmer (*Part-time*) 2003-2007
 Responsibilities: Computer Lecturer and C/C++ Programmer Iran
 Addr.: 18th Ave, Saat Sq. Sari, Mazandaran, Iran Tel: +981513246140

Invited Lectures and Talks

- Invited Lecturer, Software Engineering and Soft. Lab, Islamic University of Fouman, Iran, 2012
- Invited Lecturer, Software Engineering and Soft. Lab, Islamic University of Sowmesara, Iran, 2009- 2012
- Invited Presenter, Software programming with R++, ICEEE'9, Iran, 2009
- Invited Presenter, Time Optimizing in Economical Grid Using Adaptive Stochastic Petri Net Based on Learning Automata, GCA'11, USA, 2011

Administrative Duties

- Faculty member in Computer Engineering at Islamic Azad University, Somesara Branch Iran, 2011

Academic Reviewer

- IEEE Transactions on Fuzzy Systems, IEEE, 2014
- Computer Networks Elsevier, 2013
- IEEE Transactions on Cloud Computing IEEE, 2015
- Transactions on Systems, Man and Cybernetics: Part A: Systems and Humans IEEE, 2014
- Network Magazine IEEE, 2014
- Computer Communication Magazine IEEE, 2014
- Journal of Parallel and Distributed Computing Elsevier, 2012
- Applied Soft Computing Elsevier, 2013
- Wireless Personal Communications Springer, 2014
- Journal of Supercomputing Springer, 2011
- Encyclopedia of Cloud Computing (Book) Wiley, 2014
- Transactions on Parallel and Distributed Systems IEEE, 2015
- Wireless Networks Springer, 2013
- Peer-to-Peer Networking and Applications Springer, 2012
- Information System Frontier Journal Springer, 2012
- Annals of Operations Research Springer, 2014
- IEEE Access IEEE, 2016
- IEEE IT Professional IEEE, 2016
- MDPI Sensors, Algorithms, Data, Entropy, Computers, Journal of Sensor and Actuator Networks MDPI, 2016
- IEEE Transactions on Industrial Informatics September, 2016
- International Journal of Distributed Sensor Networks (IJDSN) SAGE, 2016
- IEEE Transactions on Big Data October, 2016
- IEEE Internet of Things Journal November, 2016
- IEEE Communications Magazine November, 2016
- IEEE Transactions on Mobile Computing December, 2016

Technical Committee Member

5th IBICA, 4th WICT, 6th SoCPaR, 6th NaBIC, CASoN, CISA Workshop, ICITeS'2016, IARIA 8th Cloud Computing, COMPLEXIS, 9th ICAART 2017, 14th I-SPAN 2017, ISAPE' 2017, 13th ICWMC 2017, NESD 2017, FSDM 2017, EC 2017, ICCISN 2018, ESG 2018, Since 2014

Editorial Member

- Associate Editor, Springer, Cluster Computing (Impact Factor=2.04) Since January 2018
- Editor, Wiley, Wireless Communications and Mobile Computing Since Feb 2018
- Editor, KSII Transactions on Internet and Information Systems (Impact Factor=0.452) Since July 2016
- Guest Editor, Wiley, Concurrency and Computation: Practice and Experience Since Jan. 2018
- Editor, International Journal of Advanced Pervasive and Ubiquitous Computing (IJAPUC), IGI-GLOBAL Since August 2016
- Editor, Wireless Communications and Mobile Computing Since Feb. 2018

Mentored Researchers

- Massimo Biancifiori, **Master holder**, IT Engineer at Telecom, Italy
- Domenico Paravati, **Master holder**, IT Risk & Assurance Junior Analyst -Financial Services Office press EY, Italy
- Saeed Javanmardi, **Master holder**, Nikan network Company, Shiraz, Fars, Iran
- Zahra Pooranian, **PostDoc Candidate**, Dept. Computer Science, University of Padova, Padova, Italy
- Ali Ahmadi Dounchali, **Master holder**, Qazvin Islamic Azad University, Qazvin, Iran
- Zia Delkhah, **Master holder**, Qazvin Islamic Azad University, Qazvin, Iran
- Paola Vinueza Naranjo, **PhD**, University of Rome, Italy
- Mohammad M. Tajiki, **PhD**, University of Rome, Tor Vergata, Italy

EDUCATION

- **Ph.D.** Information Communication Telecommunications (ICT), Sapienza University of Rome, Rome Italy, 2012-2016
- **M.Sc.** Software Engineering, Qazvin Islamic Azad University (QIAU), Qazvin Iran, 2007-10
- **B.Sc.** Software Engineering, Iran University Science and Technology (IUST), Tehran Iran, 2001-2006

AWARDS, HONORS, CERTIFICATES AND PROFICIENCIES

Recent Awards

- Proposal Research Grant B Fellowship, University of Padua, **26500 € p.a for 2 years** Italy, 2018-2020
- Research Associate Fellowship, Italian Government Educational, **19800 € p.a** Italy, 2015-2016
- Full PhD Fellowship, High Impact Research, Ministry of Higher Education-**19500 € p.a** Italy, 2012-2015

Honors

- Ranked 1st among 50 applicants participated in International fellowship PhD position competitions for the DIET department in Sapienza University of Rome Italy, 2012
- Ranked 3th among 50 M.Sc. holders in computer engineering– Qazvin Islamic Azad University Iran, 2010
- Ranked 645th among 300,000 applicants at national entrance tests for study in B.Sc. Iran, 2000

Certificates and Licenses

- **FGCS- Elsevier-Outstanding Reviewer Award 2017 (JCR IF 2016: 3.99)** 2017
- **Pervasive and Mobile Computing- Elsevier -Outstanding Reviewer Award 2017 (JCR IF 2016: 2.34)** 2017
- **Sensors- Outstanding Reviewer Award 2017 (JCR IF 2016: 2.67)** 2017
- **CEH Certified Engineer, in LITEC-IRAN at Sharif University, Intermediate Level** Iran, 2012
- **Java Programming (J2EE) Certified Engineer, in LITEC-IRAN at Sharif University, Intermediate Level** Iran, 2012

Language Proficiencies

- **English IELTS AT score:** (R: 6 L: 6.5 S: 6.5 W: 6.5), overall: 6.5
- **English TOEFL ibt score:** (R: 20 L: 15 S: 20 W: 18), overall: 73
- **English GRE score:** (Q: 730, V: 430, W: 3)
- **Cambridge English Score:** RSA Exam: Certificate in Spoken English and Comprehension-Preliminary Level (Issue Date: 04/July/2000)-Grade B)
- PhD in English, **Persian:** Native, **Italian:** Grade B

Technical Proficiencies

- C, Java, HTML, jQuery, SQL, LaTeX
- NS2 Distributed Test-bed Design and Development
- Statistical and Mathematical Modeling, Statistical Analysis (SPSS, Matlab), Data Analytics
- Mathematical toolbox on Matlab such as CVX, Mathematica
- Microsoft Team Foundation (Server-Client), Microsoft .Net Studio (2005&2008)- Elementary
- SQL Server 2005, Oracle 11g Express- Elementary
- Academic and industrial software testers such as IBM Rational Rose, IBM Rational Robot, RanoRex Studio, PN Tools, SPNP (Stochastic Petri Net Package), SHRAPE, TPN 3.0(Timed Petri Net)
- Cloudsim/Gridsim Cloud/Grid packages Platforms (started in Jun 2013)

MEMBERSHIP

- IEEE Computer Society, Member, Since 2011
- IEEE Systems Man and Cybernetics Society Technical Committee on Soft Computing, Since 2011
- IEEE Communications Society, Member, Since 2013
- Machine Intelligence Research Labs (MIR Labs), Since 2012
- IEEE Cloud Computing, Since 2014
- IEEE Internet of Things, Since 2012
- IEEE Computer Society Digital Library, Since 2013
- IEEE Wireless Communications Magazine, Since 2012

PROJECTS

- | | | | |
|---|---|-----------|------------|
| • Horizon 2020 EU Project:
SUPERFLUIDITY | http://superfluidity.eu/ | 7M Euro | 2015-2018 |
| • Italian PRIN15 (GAUCHO) | https://www.gaucho.unifi.it/ | 400K Euro | 2016-2019 |
| • University of Modena and Reggio Emilia:
S2C: Secure, Software-defined Cloud | http://web.ing.unimo.it/sammclouds/s2c.html | 35K Euro | 2018-2019 |
| • Italian Ministry of Education, Universities
and Research (MIUR): V-FoG | N/A | 20K Euro | 2017-2018 |
| • University of Modena and Reggio Emilia:
SAMMClouds | http://web.ing.unimo.it/sammclouds/sammclouds.html | 20K Euro | 2016-2017 |
| • Italian Ministry of Education, Universities
and Research (MIUR): WISECLOUD | | 35K Euro | 2015-2017 |
| • Iranian National Project: GCOMS
(General Cargo Operations Management
System) | http://gcomsgateway.pmo.ir/newGateWay/ | 10M Euro | 2008-cont. |
| • Iranian National Project: TCTS (General
Cargo Operations Management System) | http://sms.rahyab.ir/ | 1M Euro | 2008-cont. |

REFERENCES

- Professor Rajkumar Buyya, Professor, Distinguished Professor, Director of the Cloud Computing and Distributed Systems (CLOUDS) Laboratory, University of Melbourne, Australia Email: rbuyya@unimelb.edu.au
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