

PERSONAL INFORMATION

Mohammad Shojafar



📍 Via dei sabelli, 189, int C, 00185 Rome (Italy)

☎ (+39) 327 114 41 58

✉ m.shojafar@yahoo.com

🌐 www.mshojafar.com <https://www.linkedin.com/in/mohammad-shojafar-6b673332?>

💬 Skype m.shojafar

Sex Male | Date of birth 5 Sep 1983 | Nationality Iranian

POSITION

Senior Researcher (Research Grant B)

WORK EXPERIENCE

1 Jan 2018–Present

Senior Researcher/Programmer

SPRITZ Security and Privacy Research Group, University of Padova, Padova (Italy)

My responsibilities:

- Contribute to the acquisition, set up, maintenance and integration of the Software Defined Network and Cloud infrastructure
- Security Network monitoring and measurement, including, e.g., resource provisioning, performance analysis and modeling of SDNs
- Analytical Modelling and mathematical analysis of the security issues (network trustworthy, misconfiguration, Accountability, and steal flow) on SDN/NFVs and network devices such as printers and propose robust algorithms
- Analytical Modelling and numerical analysis of malware/ransomware detection systems in Large datasets

1 Dec 2016–31 Jan 2018

Research and Development Engineer

CNIT (Consorzio Nazionale Interuniversitario per le Telecomunicazioni), Rome (Italy)

I was as a CNIT senior researcher at the University of Rome Tor Vergata to work on European H2020 Superfluidity project. The SUPERFLUIDITY project aims at achieving superfluidity on the Internet: the ability to instantiate services on-the-fly, run them anywhere in the network (core, aggregation, edge) and shift them transparently to different locations.

My responsibilities:

- Establish solution environments for the 5G Cloud section of the SUPERFLUIDITY project
- Propose some scheduling and adaptive allocation techniques over the Cloud Datacenter in the SUPERFLUIDITY project
- Apply Artificial and meta-heuristic methods (e.g., machine learning and reinforcements) over 5G network architecture over SUPERFLUIDITY project.

1 Dec 2015–1 Dec 2016

Research Associate (Programmer/Analyzer)

University of Modena and Reggio Emilia, Modena (Italy)

Work on the project SAMMClouds: Secure and Adaptive Management of Multi-Clouds

Description: The SAMMClouds project aims to address some of the open issues related to the Software as a Service (SaaS) and Infrastructure as a Service (IaaS) systems. Specifically, the research activities will focus on the study and proposal of innovative solutions with regard to three main issues:

- Monitoring and management of IaaS cloud and multi-cloud systems
- Resource management in SaaS multi-cloud systems

- Data protection and security in cloud systems

My responsibilities:

- Propose, implement some analytical solutions techniques some novel solutions using AMPL (Knitro, MOSEK, and IBM CPLEX) optimizers.
- Incorporate the programming language (C++/python) using a bash script to the formulation, testing, deployment, and maintenance of the multi-cloud resource management issues.
- Implement VMs managing algorithm using Docker and Oracle Virtual box in some tasks.

1 Nov 2012–20 May 2016

Software Programmer (Research Assistant)

Sapienza University of Rome, Rome (Italy)

My responsibilities:

- Design, implementation, and evaluation of energy-provisioning cloud-based (virtualized)/networked data centers 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)
- CloudSim Platform knowledge and hands-on experiences (Java coding)
- CVX/MOSEK packages over MATLAB Platform knowledge and hands-on experiences
- Develop efficient coding in C++/Matlab and C++ memory checking methods

Business or sector Education

1 Apr 2012–1 Oct 2012

Software Programmer

National Iran Oil Company (NIOC), Tehran (Iran)

My responsibilities:

- Software Analysing on PISDB and FFSDDB projects (oil field datastream organization software)
- Maintain confidentiality with regard to the information being processed, stored or accessed on the internal projects
- Coordinating the data entry flow and establishing initiative methods for reliable data entry
- Analyze, develop and implement testing procedures, programming (C++, Java) and documentation
- Record and document actual results as per expected results
- Review and adhere to quality system documentation and company policies.

Business or sector Information and communication

1 Apr 2007–31 Dec 2011

Network Technician

Sina Laboratory, Babolsar (Iran)

- Install network components and operating systems (WIN 2008 serv.,5 nodes winXP, internal switch)
- Troubleshooting network issues (hardware, software or network faults)

1 Apr 2008–31 Dec 2008

Software Programmer

Tidewater Ltd co. (Rahyab Rayaneh Gostar), Tehran (Iran)

I attended in two projects **GCOMS**, **TCTS** as a software tester and programmer.

In **GCOMS**, which is a system under direction of ports and maritime organization in non-container terminals domain with slogan of creating unity procedure in port operations cycle at nine significant general cargo commercial ports of the country such as Imam Khomeini, Shahid Rajae, Boshehr, Shahid BaHonar, Khoramshahr, Chabahar and northern ports as Anzali, Noshahr and Amir Abad is implemented thoroughly within two years and recently is utilized in three ports: Abadan, Lengeh and Sajafi. My responsibility is to R&D and Design on IBM Rational Robot, IBM Rational Administrator,

Testing Method and Error Recovery in Debugging Unit of GCOMS besides making tests scenarios and developing test program using C#.Net language applying RanoRex Testing Tool. This system is proud to be the second award winner of AFACT Electronic Asia Transcendent Pattern in 2011.

In **TCTS** Project, which is a smart combination of hardware and software as an exhaustive resource for managing and leading container operations which is designed and implemented for administering the most extensive container port of Iran, Shahid Rajaei Port since 2002. Conveniences performed by this system in terminal management, members appreciate container and cargo transportation of Shahid Rajaei port in thirty third session of maritime universal organization facilitation committee. My task was to test the program and troubleshooting the problems may happen in the connection exploited black box software testing. We monitored the testing and the test environment, often using Ranorex tool for this task, and often gather performance metrics by writing and executing test scripts and bug reports. Throughout the testing life cycle, we reviewed each other's work, including test specifications, defect reports and test results.

In a nutshell, I analytically and empirically investigated the impact of concurrency on software testers such as IBM Rational Robot and devising a model for concurrency problem (e.g., C#/Bash prog.), apply analytical and problem solving skills to verify product through testing and adhere to change control and testing processes for modifications to analytical models.

Business or sector Information and communication

1 Oct 2004–1 May 2006

Network Technician

Shibkaran Construction Co, Sary (Iran)

- Install network components and operating systems (WIN 2003 serv., 15 nodes winXP, internal switch)
- Troubleshooting network issues (hardware, software or network faults)

Business or sector Construction

1 Jun 2003–22 Sep 2003

Computer systems analyst

Medical University, Sary (Iran)

- Maintenance the OSs and educate the internal management software to the 150+ employee of the medical universities
- Troubleshooting the hardware and software of the PCs
- Documentations and data orchestration using Microsoft Office (Access and SQL) and VB Programming for troubleshooting of the software integration of the official processing

EDUCATION AND TRAINING

1 Nov 2012–20 May 2016

Information and Communications Technology

Advanced university studies (Doctorate)

Sapienza University of Rome, Rome (Italy)

- Design, implementation, and evaluation of energy-provisioning cloud-based (virtualized)/networked data centers testbed
- Develop some software-based solutions by studying data center structure (model), information needs and studying data center traffic (workflow)
- Mathematical, statistical modelling, and experimental analysis of latency problem in data centers
- Cloudsim Cloud Computing Platform knowledge and hands-on experience (using C++/Java over Eclipse IDE)
- Updates my knowledge by studying state-of-the-art development tools, programming techniques, and computing equipment.
- Develop efficient coding in C++/Matlab

22 Sep 2007–15 Sep 2010

Computer Science (Software)

University studies (Master)

Qazvin Islamic Azad University, Qazvin (Iran)

22 Sep 2001–4 Dec 2006

Computer Science (Software)

University studies
(Bachelor)

Iran University Science and Technology, Tehran (Iran)

- Software engineering courses
- Several technical reports and course projects such as MPI programming, C/C++/Java academic projects
- Software analyzing and modeling tools such as UML/RUP and Petri nets
- Be familiar with Microsoft Office, Microsoft Visual Studio, Adobe software

1 Jun 2012–12 Oct 2012

Certified Ethical Hacker (CEH)

Upper secondary
education

Sharif University of Technology, Tehran (Iran)

- System Development & Management
- System Analysis & Audits
- Security Testing/Vulnerabilities
- Reporting
- Mitigation
- Ethics

1 Apr 2011–24 Mar 2012

JAVA J2SE Developer

Upper secondary
education

Sharif University of Technology, Tehran (Iran)

Java Applets, Web Programming Skills, Teamwork, Verbal Communication, Web User Interface Design, Software Development Process, Object-Oriented Design (OOD)

PERSONAL SKILLS

Mother tongue(s) Persian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C1
IELTS English Language Test Test of English as a Foreign Language (TOEFL)					
Italian	B1	A1	A2	A1	A1
French	A1		A1		

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills

- Good written communication skills gained through my experience as software specialist
- Ability to communicate and share his opinion in a team beside interacting with the team members

Organisational / managerial skills

- Technical skills in programming and optimization technology
- Good memory, ability to abstract, think on several levels
- Attention to detail

Job-related skills

- Analyzing data

- Flexibility/Adaptability
- Acting as a Team Player
- Self-Confidence/Positive Attitude
- Good Communication Skills

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Independent user	Proficient user

Digital skills - Self-assessment grid

Ethical Certified Hacker Java Programming- Advanced Microsoft Office 2007,10 Algorithm Design
--

- **C++/Java Coding**
- **Able to write and execute complex queries in SQL**
- **Master in scripting languages e.g., HTML, CSS**
- Ability to work with several operating systems e.g., Windows, OSX, and Linux
- Good command of Microsoft Office™ tools
- Intermediate command of Oracle tools (JAVA, Oracle Enterprise 11g)
- Master in CASE & CAME Tools e.g., Rational Rose, Rational Robot, RanoRex Studio, PN Tools, SPNP (Stochastic Petri Net Package), Power Designer

Other skills

JBuilder, SQL Server (programming), Cascading Style Sheets (CSS), Microsoft Visual Studio, Computer technology (engineering), Test management (data systems), VMs management software

ADDITIONAL INFORMATION

Honours and awards

- **Permanent resident in Italy (obviously in EU) since January 2018.**
- Best paper Nomination in *CLOSER 2016*, 2016.
- Italian Government, Ph.D. Student Fellowship Award, 2012-2015. The only recipient for the DIET department, *the Sapienza University of Rome*, 2012.
- Among top 1000 in the Iranian National University Exam (500,000 participants), 2001.

Projects

- EU H2020 SUPERFLUIDITY: A converged cloud-based 5G architecture (7.7M euro)
- EU H2020 TagItSmart! - Smart Tags driven service platform for enabling ecosystems of connected objects (7.0M euro)
- ITALY MIUR PRIN GAUChO: A Green Adaptive Fog Computing and Networking Architecture (400K euro)
- ITALY MIUR S2C: Secure, Software-defined Clouds (35K euro)
- ITALY MIUR V-FOG: Vehicular Fog energy-efficient QoS mining and dissemination of multimedia Big Data streams (35K euro)
- ITALY MIUR SAMMClouds: Secure and Adaptive Management of Multi-Clouds (35K euro)
- IRAN TCTS: Tidewater Container Terminal System (1.0M euro)
- IRAN GCOMS: General Cargo Operations Management System (10M euro)

Honours and awards

- Fellowship **Award**: 58500 Euro, High Impact Research, Ministry of Higher Education, Rome, Italy
- **Award**: 19500 Euro, Department of "Enzo Ferrari", University of Modena and Reggio Emilia,

Modena, Italy

- Fellowship **Award**: 54000 Euro, University of Padova, Padova, Italy
- **Award**: 5000 Euro, Principle Investigator, Research Fund for University of Padova, Italy
- **Outstanding Reviewer** 2017 in FGCS, JPDC: Elsevier Publisher
- **Top Reviewer Award 2017: MDPI Publisher**

Publications **Book**

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

- **M. Shojafar**, N. Cordeschi, E. Baccarelli, *Energy-efficient Adaptive Resource Management for Real-time Vehicular Cloud Services*, **IEEE Transaction on Cloud Computing**, Vol. PP, No. 99, pp. 1-14, 06 April 2016. [Acceptance rate=7%] **[JCR Class: Q1]** [Most cited][108+ citations]
- **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**, Vol. PP, No. 99, pp. 1-14, 13 October 2016. [Acceptance rate=7%] **[JCR Class: Q1]**
- 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**, **IF=7.2**, Vol. 30, No 2, pp. 54-61, March 2016. **[JCR Class: Q1]**
- 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**, **IF=3.2**, Vol. 5, 08 May 2017, pp. 9882-9910. **[JCR Class: Q1]**
- 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**, Vol. 102, pp. 89-106, 1 April 2017. **[JCR Class: Q1]**
- 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**, January 2018.
- 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)**, Volume 73, Issue 2, 2017, pp. 733-755, February 2017. **[JCR Class: Q2]**
- **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)**, Volume 73, Issue 12, pp 5239-5260, December 2017. **[JCR Class: Q2]**
- 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**, pp. 1-17, October 2017. **[JCR Class: Q1]**
- H. Mostafaei, **M. Shojafar**, B. Zaher, M. Singhal, *Barrier Coverage of WSNs with the Imperialist Competitive Algorithm*, Springer, **Journal of Supercomputing (SUPE)**, Volume 73, Issue 11, pp 4957-4980, November 2017. **[JCR Class: Q2]**
- 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**, Vol. 2, Issue 1, pp. 1-12, January 2015. **[JCR Class: Q1]**
- N. Cordeschi, **M. Shojafar**, E. Baccarelli, *Energy-saving self-configuring networked data centers*, Elsevier, **Computer Networks**, Vol. 57, Issue 17, pp. 3479-3491, December 2013. **[JCR Class: Q1]**
- **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**, Vol. 18, No. 2, pp. 829-844, June 2015. [JCR Class: Q1]
- **M. Shojafar**, S. Abolfazli, H. Mostafaei, M. Singhal, *Improving Channel Assignment in Multi-Radio Wireless Mesh Networks with Learning Automata*, Springer, *Wireless Personal Communications*, Vol. 82, No. 1, pp. 61-80, April 2015. [JCR Class: Q2]
 - 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**, Under Review, January 2018. [JCR Class: Q1]
 - Z. Pooranian, **M. Shojafar**, J.H. Abawajy, A. Abraham, *An Efficient Meta-heuristic Algorithm for Grid Computing*, Springer, **Journal of Combinatorial Optimization (JOCO)**, Vol. 30, No. 3, pp. 413-434, 2015. [JCR Class: Q2]
 - **M. Shojafar**, J.H. Abawajy, Z. Delkhah, 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*, Vol. 8, No. 1, pp. 120-136, January 2015. [JCR Class: Q2]
 - 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, Issue 1, pp. 57-66, January 2015.
 - 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)**, Vol. 69, Issue 2, pp. 955-975, August 2014. [JCR Class: Q2]
 - 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*, Vol. 27, No. 1, pp. 55-67, July 2014. [JCR Class: Q2]
 - 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)**, Vol. 68, Issue 2, pp. 599-623, May 2014. [JCR Class: Q2]
 - **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)*, pp. 1-18, August 2013. [JCR Class: Q1]
 - 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.
 - Z. Pooranian, **M. Shojafar**, J.H. Abawajy, M. Singhal, *GLOA: A New Job Scheduling Algorithm for Grid Computing*, *International Journal of Interactive Multimedia and Artificial Intelligence (IJIMAI)*, Vol. 2, No. 1, pp.59-64, March 2013.
 - **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**, Paris, France, 20-22 February 2018, **Accepted**.
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, 4-8 December 2017, **Accepted**.
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.
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.
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.
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.
 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.
 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]
 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.
 11. J. Zare, S. Abolfazli, **M. Shojafar**, A. Kamsin, *Resource Scheduling in Mobile Cloud Computing: Taxonomy and Open Challenges*, **8th IEEE IThing**, Sydney, Australia, pp. 594-603, December 2015.
 12. **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.
 13. **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+)
 14. Sh. Shamshirband, **M. Shojafar**, A.A.R. Hosseinabadi, A. Abraham, *A New Metaheuristic Algorithm for Solving the Multi-objective Occasion Commodity Vehicle Routing Problem*, **14th IEEE HIS**, Kuwait, Kuwait, pp. 12-17, December 2014.
 15. 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.
 16. 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.
 17. I. Valizadeh, **M. Shojafar**, A. Abraham, *Rapid Way Mobile Application in Wireless Sensor Network: A Practical Research in Transportation System*, **6th IEEE NaBIC**, Porto, Portugal, pp. 133-138, June 2014.
 18. 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, Innovations in Bio-inspired Computing and Applications Advances in Intelligent Systems and Computing, Vol. 237, pp. 143-152, January 2014.

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 WFM's Optimization*, Bachelor Thesis, Faculty of Computer Engineering, Iran University Science and Technology (IUST), December 2006. **Advisor: Dr. A.A Ghadiri**

Presentations **Keynote Presentations**

- **(2017)** SPRITZ-CLUSIT Workshop on Future Systems Security and Privacy, Padua, Italy Link: <http://spritz.math.unipd.it/events/2017/EU-cybersecuritymonth-workshop/>
- **(2018)** Keynote in Fog and Cloud Technology (University of Ottawa), 1-3 March, Canada
- **(2018)** Keynote in I2SBD2C (International Spring School for Big Data and Cloud Computing), 7-8 April, Tunisia

Citations **Google Scholar**

Citations: 1380, H-Index: 20

SCOPUS

Citations: 770, H-Index: 15

Memberships **Editorial Member**

- Associate Editor, Springer, Cluster Computing (**JCR IF 2016: 2.26**)
- Editor, KSII Transactions on Internet and Information Systems (**JCR IF 2016: 0.5**)
- Guest Editor, Wiley, Concurrency and Computation: Practice and Experience, (**JCR IF 2016: 1.133**)
- Editor, Taylor & Francis, International Journal of Computers and Applications (**ESCI in Web of Science**)
- Editor, IGI Global, International Journal of Advanced Pervasive and Ubiquitous Computing (IJAPUC),

Technical Committee (TPC) 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

Academic Reviewer

- IEEE Transaction on Fuzzy Systems
- IEEE Transactions on Industrial Informatics
- IEEE Transactions on Parallel and Distributed Systems
- IEEE Transaction on Cloud Computing
- IEEE Transactions on Systems, Man and Cybernetics: Part A: Systems and Humans
- IEEE Transactions on Big Data
- IEEE Transactions on Mobile Computing
- IEEE Network Magazine
- IEEE Computer Communication Magazine
- IEEE Access
- IEEE Communications Magazine
- IEEE Internet of Things Journal
- IEEE IT Professional

- Computer Networks, Computer Communications, Future Generation Computer Systems, Journal of Parallel and Distributed Computing, Applied Soft Computing (**Elsevier**)
- Journal of Supercomputing, Wireless Networks, Information System Frontier Journal, Annals of Operations Research, (**Springer**)
- International Journal of Distributed Sensor Networks, (**SAGE**)
- Encyclopedia of Cloud Computing (Book), (**Wiley**)
- Sensors, Algorithms, Entropy, Computers, Energies, (**MDPI**)

References

- **Prof. Enzo Baccarelli**, Professor, Scientific Investigator of PRIN15, Gaucho/V-FOG projects, PhD supervisor, Sapienza University of Rome, Via Eudossiana 18, 00184 Rome, Italy. Email: enzo.baccarelli@uniroma1.it
- **Prof. Mauro Conti**, A/Professor, University of Padua, Via Trieste, 63 - 35131, Padua, Italy, Tel: +39-049-827-1488, Email: conti@math.unipd.it
- **Prof. Rajkumar Buyya**, Distinguished Professor, Director of the Cloud Computing and Distributed Systems (CLOUDS) Laboratory, School of Computing and Information Systems, University of Melbourne, Australia. Tel: +61-3-83441344, Email: rbuyya@unimelb.edu.au
- **Prof. Mukesh Singhal**, Chancellor's Professor, University of California, Merced, USA. Tel: +1-209-228-4344 Email: msinghal@ucmerced.edu