

# Curriculum Vitae: Molka Gharbaoui, Ph.D.

#### **Personal Data**

Name: Molka Gharbaoui Place of Birth: Tunis, Tunisia Date of Birth: 04 April 1983

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#### **Work Career**

- August 2022 Now: Assistant Professor at the Scuola Superiore Sant'Anna, Pisa, Italy. She is currently carrying out research activities within several European and Italian research projects such as the 5G Smart Edge Node and Smart Objects enabling Reliable Services Extended All over the seas (5G Sensor @SEA) project and Proximity Care Tele-Emergency: supporting tele emergency systems for health professionals.
- November 2020 July 2022: Research Engineer at the Scuola Superiore Sant'Anna, Pisa, Italy. She was involved in several European and Italian research projects such as the 5G-enabled Growth in Vertical Industries project (5Growth) and 5G Smart Edge Node and Smart Objects enabling Reliable Services Extended All over the seas (5G Sensor @SEA) project.
- November 2017 October 2020: Researcher at the National Inter-University Consortium for Telecommunications (CNIT-LNRF www.cnit.it) laboratory in Pisa, Italy. She was involved in the 5G Mobile Transport Platform for Verticals project (5G-Transformer) funded by the European Union's Research and Innovation Programme Horizon 2020. She was also performing research work within the 5GinFIRE project funded by the European Horizon 2020 Programme for research, technological development and demonstration. She co-chaired the Workshop on

Orchestration for Software-Defined Infrastructures (O4SDI) and served as TPC member in many IEEE conferences.

- November 2012 October 2017: Postdoctoral research fellow at the Scuola Superiore Sant'Anna, Pisa, Italy. In this period, she worked on several regional, national and European research projects such as 5GEx, Fed4FIRE, Ofelia and GEMMA. She also co-authored several papers in international journals and conference proceedings. The studies performed during this period focused on the following topics:
  - Network virtualization and orchestration
  - o Implementation and performance evaluation of software-defined networking solutions in virtualized environments
  - Development and implementation of service-oriented architectures for next generation Networks
  - Software-defined networking for clouds
  - o Smart grid and electric vehicles

#### Education

- December 2012: Ph. D degree in Innovative Technologies of Info. & Com. Eng. and Robotics Telecommunications from the Scuola Superiore Sant'Anna, Pisa, Italy. The title of the Ph.D. dissertation is "Dynamic Resource Provisioning and Security Solutions in Service-Oriented Networks".
- November 2008 November 2012: Ph.D. student at the "Centre of Excellence for Communications Networks Engineering" of the Scuola Superiore Sant'Anna, Pisa, Italy. Her main research interests included the following topics:
  - o Optical network control and management protocols
  - o Security issues in next generation networking
  - o Trust management in multi-domain networks
  - Service orchestration
  - o Provisioning of QoS in IP/MPLS networks
- **September 2008:** Master's degree "International Master on Communication Networks Engineering" (IMCNE) organized by the Scuola Superiore Sant'Anna, Pisa, Italy.
- July 2007: Diploma in Computer Sciences Engineering from the National School of Computer Sciences, Tunisia (ENSI).
- June 2002: High school diploma with First Honours from the Kheireddine Bacha School, Ariana, Tunisia.

## Research Activity

Molka Gharbaoui's research interests are mainly related to the design and implementation of different aspects for network management, resource orchestration and performance evaluation.

The most relevant topics include:

- Orchestration and management of resources and services in Software Defined Infrastructures
- Network performance of software platforms based on experimentations within virtualized environments
- Management of network slices
- Network virtualization
- QoS provisioning
- Development and implementation of service-oriented architectures
- Next generation networks design

### **Participations in Research Projects**

- Research projects funded by the European Commission:
  - FP7 OFELIA (WP13 –Extending OpenFlow for Unified Management and Control of Cloud Data Center Resources (EMOTICON))
  - Fed4FIRE EVIDENCE (Validating Traffic Engineering in OpenFlow Data Center Networks for Cloud Service Deployments)
  - o 5GEx (5G Exchange)
  - o 5Growth (5G-enabled Growth in Vertical Industries)
  - o 5GInFire SLICENET 5G (Slice SDN-based Network Management in 5G)
  - o 5G- Transformer (5G Mobile Transport Platform for Vehicles)
  - o TRIANGLE DiMoVis (Distributed Mobile Video Surveillance in a 5G Ecosystem)
  - o Fed4FIRE+ LASH-5G (Latency-aware and self-adaptive service chaining in reliable 5G/SDN/NFV infratructures)
  - o 5G SENSOR @SEA (5G Smart Edge Node and Smart Objects enabling Reliable Services Extended All over the seas)
- Research projects funded by Tuscany Region:
  - o Intelligent Management of Electric Vehicles and Microgrid for Sustainable Mobility (GEMMA)

#### **Editorial Activities**

Molka Gharbaoui is currently serving or has served as:

- **Guest Editor** for a Special Issue "Intent-based Software-Defined Networks" of the *Computers* international scientific peer-reviewed open access journal published by MDPI in September 2021.
- **Topic Editor** for the *Applied Sciences* international scientific peer-reviewed open access journal published by MDPI.

She was involved in the organization of the following events:

- **TPC co-chair** for the 2<sup>nd</sup> International Workshop on Intent-Based Networking (WIN 2022) to be organized in June 2022.
- **TPC co-chair** for the IEEE Conference on Network Function Virtualization and Software Defined Networks (NFV-SDN 2021) organized in November 2021.
- **Demo co-chair** for the 24th Conference on Innovation in Clouds, Internet and Networks (ICIN 2021) organized virtually in March 2021.
- **Demo co-chair** for the IEEE Conference on Network Function Virtualization and Software Defined Networks (NFV-SDN 2020) organized virtually in November 2020.
- **Publicity co-chair** for the IEEE/IFIP Network Operations and Management Symposium organized virtually in April 2020.

She served as **Technical Program Committee member** for the following international conferences:

- ICCVE 2013 (International Conference on Connected Vehicles & Expo)
- ICCVE 2014 (International Conference on Connected Vehicles & Expo)
- ICCVE 2015 (International Conference on Connected Vehicles & Expo)
- INTGAST 2015 (International Conference on Integrated and Sustainable Transportation)
- ICCVE 2016 (International Conference on Connected Vehicles & Expo)
- ITU K-2016 (ITU Kaleidoscope 2016 ICTs for a Sustainable World)
- NFV-SDN 2016 (IEEE Conference on Network Function Virtualization and Software Defined Networks)
- NFV-SDN 2017 (IEEE Conference on Network Function Virtualization and Software Defined Networks)
- NFV-SDN 2018 (IEEE Conference on Network Function Virtualization and Software Defined Networks)
- NFV-SDN 2019 (IEEE Conference on Network Function Virtualization and Software Defined Networks)
- ICCVE 2019 (International Conference on Connected Vehicles & Expo)
- GC 2019 Workshop FIATS (IEEE GLOBECOM 2019 Workshop on Future Internet Architecture, Technologies and Services for 2030 and beyond)
- ICIN 2020 (23<sup>rd</sup> Conference on Innovation in Clouds, Internet and Networks and Workshops)
- NFV-SDN 2020 (IEEE Conference on Network Function Virtualization and Software Defined Networks)
- ICIN 2021 (24<sup>th</sup> Conference on Innovation in Clouds, Internet and Networks and Workshops)
- NetSoft 2021 (IEEE 7<sup>th</sup> International Conference on Network Softwarization)
- NFV-SDN 2021 (IEEE Conference on Network Function Virtualization and Software Defined Networks)
- NFV-SDN 2021 Doctoral Symposium (IEEE Conference on Network Function Virtualization and Software Defined Networks Doctoral Symposium)

- WIN 2021 (1<sup>st</sup> International Workshop on Intent-Based Networking)
- WIN 2022 (2<sup>nd</sup> International Workshop on Intent-Based Networking)
- NOMS 2022 (IEEE/IFIP Network Operations and Management Symposium)

#### She also served as a **reviewer** for the following journals:

- IEEE Transactions on Network and Service Management
- IEEE Internet of Things Journal
- IEEE Access
- Transactions on Emerging Telecommunications Technologies
- Elsevier Computer Networks
- Elsevier Computer Communications
- Springer Photonic Network Communications
- PLOS ONE
- MDPI Applied Sciences
- MDPI Sensors Journal
- MDPI Symmetry Journal
- MDPI Electronics Journal

#### National and international awards for research activities.

- N<sup>2</sup>Women: Rising Stars in Computer Networking and Communications IEEE N2Women (Networking Networking Women) (07/2020)
- **Best Demo Award** IEEE NFV-SDN Conference (11/2018)
- **Best Experiment Prize** FED4FIRE+ ENGINEERING INTERNATIONAL CONFERENCE (03/2018)

## **Bibliometric Indexes**

- Scopus (December 2022): H=14, Citations=572, Documents=67
- Google Scholar (December 2022): H=16, Citations=790, Documents=70

#### Foreign Languages

- English: Speak, read and write fluent
- French: Speak, read and write fluent
- Italian: Speak, read and write fluent

#### **Publications in International Journals**

[1] B. Martini, M. Gharbaoui, P. Castoldi, "Intent-based zero-touch service chaining layer for software-defined edge cloud networks," Computer Networks, 2022.

- [2] <u>M. Gharbaoui</u>, C. Contoli, G. Davoli, D. Borsatti, G. Cuffaro, F. Paganelli, W. Cerroni, P. Cappanera, B. Martini, "An experimental study on latency-aware and self-adaptive service chaining orchestration in distributed NFV and SDN infrastructures," Computer Networks, 2022.
- [3] C. -Y. Chang, T. Giner Ruiz, F. Paolucci, M.A. Jiménez, J. Sacido, C. Papagianni, F. Ubaldi, D. Scano, M. Gharbaoui, A. Giorgetti, L. Valcarenghi, K. Tomakh, A. Boddi, A. Caparròs, M Pergolesi, B. Martini, "Performance Isolation for Network Slices in Industry 4.0: The 5Growth Approach," in *IEEE Access*, vol. 9, pp. 166990-167003, 2021.
- [4] M. Gharbaoui, B. Martini, G. Cecchetti and P. Castoldi, "Resource Orchestration Strategies With Retrials for Latency-Sensitive Network Slicing Over Distributed Telco Clouds," in *IEEE Access*, vol. 9, pp. 132801-132817, 2021.
- [5] S. Fichera, B. Martini, R. Martínez, M. Gharbaoui, R. Casellas, R. Vilalta, R. Muñoz, P. Castoldi, Experimental evaluation of dynamic resource orchestration in multi-layer (packet over flexi-grid optical) networks. Photon Netw Commun 40, 137–148 (2020).
- [6] G. Castellano, I. Cerrato, <u>M. Gharbaoui</u>, S. Flchera, B. Martini, F. Risso, P. Castoldi, "A model-based abstraction layer for heterogeneous SDN applications", International Journal of Communication Systems, vol. 32, n. 17, November 2019.
- [7] B. Martini, M. Gharbaoui, D. Adami, P. Castoldi, S. Giordano, "Experimenting SDN and Cloud Orchestration in Virtualized Testing Facilities: Performance Results and Comparison", IEEE Transactions on Network and Service Management, vol. 16, n. 3, May, 2019.
- [8] S. Fichera, R. Martinez, B. Martini, M. Gharbaoui, R. Casellas, R. Vilalta, R. Munoz, P. Castoldi, "Latency-aware resource orchestration in SDN-based packet over optical flexi-grid transport networks", Journal of Optical Communications and Networking, vol. 11, n. 4, April 2019.
- [9] D. Adami, B. Martini, A. Sgambelluri, L. Donatini, <u>M. Gharbaoui</u>, P. Castoldi, S. Giordano, "An SDN orchestrator for cloud data center: System design and experimental evaluation", Transactions on Emerging Telecommunications Technologies, vol. 28, n. 11, November 2017.
- [10] <u>M. Gharbaoui</u>, B. Martini, D. Adami, S. Giordano, P. Castoldi, "Cloud and network orchestration in SDN data centers: Design principles and performance evaluation", Computer Networks, vol. 108, October 2016.
- [11] <u>M. Gharbaoui</u>, B. Martini, C.J. Fung, F. Paolucci, A. Giorgetti, P. Castoldi, "An incentive-compatible and trust-aware multi-provider path computation element (PCE)", Computer Networks, vol. 108, October 2016.
- [12] W. Cerroni, M. Gharbaoui, B. Martini, A. Campi, P. Castoldi, F. Callegati, "Cross-layer Resource Orchestration for Cloud Service Delivery: A Seamless SDN Approach," Computer Networks, vol.87, 2015.
- [13] <u>M. Gharbaoui</u>, F. Paolucci, A. Giorgetti, B. Martini and P. Castoldi, "Effective Statistical Detection of Smart Confidentiality Attacks in Multidomain Networks," IEEE Transactions on Network and Service Management, vol. 10, n. 4, 2013.
- [14] <u>M. Gharbaoui</u>, B. Martini and P. Castoldi, "Anycast-based Optimizations for Inter-Data Center interconnections (Invited)," IEEE/OSA Journal of Optical Communications and Networking, vol. 4, n. 11, 2012.
- [15] F. Paolucci, M. Gharbaoui, A. Giorgetti, F. Cugini, B. Martini, L. Valcarenghi, and P. Castoldi, "Preserving Confidentiality in PCE-based Multi-domain Networks," IEEE/OSA Journal of Optical Communications and Networking., vol. 3, n. 5, pp. 465 474, May. 2011.

[16] M. Colombo, F. Martinelli, P. Mori, B. Martini, M. Gharbaoui, P. Castoldi, "Extending resource access in multi-provider networks using trust management", Journal of Comp. Net. and Comm.(IJCNC), May, 2011.

#### **Publications in Conferences**

- [1] C-Y Chang, M. A Jiménez, M. Gharbaoui, J. Sacido, F. Ubaldi, C. Papagianni, A. Zabala, L. Valcarenghi, D. Scano, K. Tomakh, A. Giorgetti, A. Boddi, K. De Schepper, "Slice Isolation for 5G Transport Networks," 2021 IEEE 7th International Conference on Network Softwarization (NetSoft), 2021, pp. 366-368.
- [2] M. Gharbaoui, B. Martini and P. Castoldi, "Implementation of an Intent Layer for SDN-enabled and QoS-Aware Network Slicing," 2021 IEEE 7th International Conference on Network Softwarization (NetSoft), 2021, pp. 17-23.
- [3] V. A. Cunha, N. Maroulis, C. Papagianni, J. Sacido, M. Jiménez, F. Ubaldi, M. Gharbaoui, C-Y. Chang, N. Koursioumpas, K. Tomakh, D. Corujo, J.P. Barraca, S. Barmpounakis, D. Kucherenko, A. Giorgetti, A. Boddi, L. Valcarenghi, O. Kolodiazhnyi, A. Zabala, J. Xavier Salvat, A. Garcia-Saavedra, "5 Growth: Secure and Reliable Network Slicing for Verticals," 2021 Joint European Conference on Networks and Communications & 6G Summit (EuCNC/6G Summit), 2021, pp. 347-352.
- [4] J. Baranda, J. Mangues-Bafalluy, L. Vettori, R. Martínez, K. Antevski, L. Girletti, C.J. Bernardos, K. Tomakh, D. Kucherenko, G. Landi, J. Brenes, X. Li, X. Costa-Pérez, F. Ubaldi, G Imbarlina, M. Gharbaoui, "NFV Service Federation: enabling Multi-Provider eHealth Emergency Services," IEEE INFOCOM 2020 IEEE Conference on Computer Communications Workshops (INFOCOM WKSHPS), 2020, pp. 1322-1323.
- [5] M. Gharbaoui, B. Martini and P. Castoldi, "Programmable and Automated Deployment of Tenant-Managed SDN Network Slices," NOMS 2020 2020 IEEE/IFIP Network Operations and Management Symposium, 2020, pp. 1-6.
- [6] P. Castoldi, S. Fichera, M. Gharbaoui, A. Giorgetti, B. Martini and F. Paolucci, "Disaggregated optical network control and orchestration of heterogeneous domains," 2019 24th OptoElectronics and Communications Conference (OECC) and 2019 International Conference on Photonics in Switching and Computing (PSC), 2019, pp. 1-3.
- [7] <u>M. Gharbaoui</u> et al., "Experimenting latency-aware and reliable service chaining in Next Generation Internet testbed facility," 2018 IEEE Conference on Network Function Virtualization and Software Defined Networks (NFV-SDN), 2018, pp. 1-4.
- [8] M. Gharbaoui et al., "Demonstration of Latency-Aware and Self-Adaptive Service Chaining in 5G/SDN/NFV infrastructures," 2018 IEEE Conference on Network Function Virtualization and Software Defined Networks (NFV-SDN), 2018, pp. 1-2.
- [9] K. Antevski, J. Martín-Pérez, N. Molner, C.-F. Chiasserini, F. Malandrino, P Frangoudis, A. Ksentini, X. Li, J SalvatLozano, R. Martínez, I. Pascual, J. Mangues-Bafalluy, J. Baranda, B. Martini, M. Gharbaoui, "Resource Orchestration of 5G Transport Networks for Vertical Industries," 2018 IEEE 29th Annual International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), 2018, pp. 158-163.

- [10] S. Fichera, R. Martínez, B. Martini, <u>M. Gharbaoui</u>, R. Casellas, R. Vilalta, R. Muñoz, P. Castoldi, "Latency-Aware Network Service Orchestration over an SDN-Controlled Multi-Layer Transport Infrastructure," 2018 20th International Conference on Transparent Optical Networks (ICTON), 2018, pp. 1-4
- [11] I. Vaishnavi, J., <u>M. Gharbaoui</u>, G. Giuliani, D. Haja, J. Harmatos, D. Jocha, J Kim, B. Martini, J. MeMn, P. Monti, B. Németh, W.Y. Poe, A. Ramos, A Sgambelluri, B. Sonkoly, L. Toka, F. Tusa, C.J. Bernardos, R. Szabo, "Realizing services and slices across multiple operator domains," NOMS 2018 2018 IEEE/IFIP Network Operations and Management Symposium, 2018, pp. 1-7.
- [12] S. Fichera, M. Gharbaoui, P. Castoldi, B. Martini and A. Manzalini, "On experimenting 5G: Testbed set-up for SDN orchestration across network cloud and IoT domains," 2017 IEEE Conference on Network Softwarization (NetSoft), 2017, pp. 1-6.
- [13] <u>M. Gharbaoui</u>, S. Fichera, P. Castoldi and B. Martini, "Network orchestrator for QoS-enabled service function chaining in reliable NFV/SDN infrastructure," 2017 IEEE Conference on Network Softwarization (NetSoft), 2017, pp. 1-5.
- [14] B. Martini, M. Gharbaoui, S. Fichera and P. Castoldi, "Network orchestration in reliable 5G/NFV/SDN infrastructures," 2017 19th International Conference on Transparent Optical Networks (ICTON), 2017, pp. 1-5.
- [15] A. Sgambelluri, F. Tusa, M. Gharbaoui, E. Maini, L. Toka, JM. Perez, F. Paolucci, B. Martini, W.Y. Poe, J Melian Hernandes, A. Muhammed, A. Ramos, OG. De Dios, B. Sonkoly, P. Monti, I. Vaishnavi, C.J. Bernardos, R. Szabó, "Orchestration of Network Services across multiple operators: The 5G Exchange prototype," 2017 European Conference on Networks and Communications (EuCNC), 2017, pp. 1-5.
- [16] A. Sgambelluri, A. Milani, J. Czentye, J. Melian, W. Y. Poe, F. Tusa, O. G. de Dios, B. Sonkoly, M. Gharbaoui, F. Paolucci, E. Maini, G. Giuliani, A. Ramos, P. Monti, L. M. Contreras-Murillo, I. Vaishnavi, C. J. Bernardos Cano, and R. Szabo, "A Multi-Operator Network Service Orchestration Prototype: The 5G Exchange," in Optical Fiber Communication Conference, OSA Technical Digest (online) (Optica Publishing Group, 2017).
- [17] B. Martini, M. Gharbaoui, I. Cerutti and P. Castoldi, "Network and datacenter resource orchestration strategies for mobile virtual networks over telco clouds," 2016 18th International Conference on Transparent Optical Networks (ICTON), 2016, pp. 1-4.
- [18] <u>M. Gharbaoui</u>, B. Martini, D. Adami, P. Castoldi and S. Giordano, "Experiments on SDN-based network and cloud resource orchestration in FED4FIRE," 2016 IEEE NetSoft Conference and Workshops (NetSoft), 2016, pp. 131-135.
- [19] A. A. Mohammed, <u>M. Gharbaoui</u>, B. Martini, F. Paganelli and P. Castoldi, "SDN controller for networkaware adaptive orchestration in dynamic service chaining," 2016 IEEE NetSoft Conference and Workshops (NetSoft), 2016, pp. 126-130.
- [20] M. Gharbaoui, I. Cerutti, B. Martini and P. Castoldi, "An orchestrator of network and cloud resources for dynamic provisioning of mobile virtual network functions," 2016 IEEE NetSoft Conference and Workshops (NetSoft), 2016, pp. 98-101.
- [21] B. Martini, D. Adami, <u>M. Gharbaoui</u>, P. Castoldi, L. Donatini and S. Giordano, "Design and evaluation of SDN-based orchestration system for cloud data centers," 2016 IEEE International Conference on Communications (ICC), 2016, pp. 1-6.
- [22] S. Ahmed, B. Martini, <u>M. Gharbaoui</u>, A. Sgambelluri and S. Shariful Alam, "Orchestration algorithms for network-assisted virtual machine migrations using OpenDayLight Controller," 2015 2nd International Conference on Electrical Information and Communication Technologies (EICT), 2015, pp. 106-111.

- [23] D. Adami, B. Martini, A. Sgambelluri, M. Gharbaoui, P. Castoldi, C. Callegari, L. Donatini, S. Giordano, "Cloud and network service orchestration in Software Defined Data Centers," 2015 International Symposium on Performance Evaluation of Computer and Telecommunication Systems (SPECTS), 2015, pp. 1-6.
- [24] B. Martini, M. Gharbaoui and P. Castoldi, "Cross-Functional resource orchestration in optical telco clouds," 2015 17th International Conference on Transparent Optical Networks (ICTON), 2015, pp. 1-5.
- [25] B. Martini, F. Paganelli, A. A. Mohammed, <u>M. Gharbaoui</u>, A. Sgambelluri and P. Castoldi, "SDN controller for context-aware data delivery in dynamic service chaining," Proceedings of the 2015 1st IEEE Conference on Network Softwarization (NetSoft), 2015, pp. 1-5.
- [26] M. Gharbaoui, R. Bruno, B. Martini, L. Valcarenghi, M. Conti and P. Castoldi, "Assessing the effect of introducing adaptive charging stations in public EV charging infrastructures," 2014 International Conference on Connected Vehicles and Expo (ICCVE), 2014, pp. 299-305.
- [27] B. Martini, D. Adami, A. Sgambelluri, <u>M. Gharbaoui</u>, L. Donatini, S. Giordano and P. Castoldi "An SDN orchestrator for resources chaining in cloud data centers". European Conference on Networks and Communications (EuCNC), June 23-26, 2014.
- [28] C. Fung, B. Martini, <u>M. Gharbaoui</u>, F. Paolucci, A. Giorgetti, and P. Castoldi "Quality of Interaction among path computation elemnts for trust-aware inter-provider cooperation". IEEE International Conference on Communications (ICC), June 10-14, 2014.
- [29] D. Adami, B. Martini, A. Sgambelluri, M. Gharbaoui, AD. Chiaro, L. Donatini, S. Giordano and P. Castoldi "An OpenFlow controller for cloud data centers: Experimental setup and validation". IEEE International Conference on Communications (ICC), June 10-14, 2014.
- [30] A. Sgambelluri, D. Adami, L. Donatini, <u>M. Gharbaoui</u>, B. Martini, S. Giordano and P. Castoldi "IT and Network SDN orchestrator for Cloud Data Center". IEEE Network Operations and Management Symposium (NOMS), May 05-09, 2014.
- [31] <u>M. Gharbaoui</u>, B. Martini, D. Adami, G. Antichi, S. Giordano and P. Castoldi "On Virtualization.aware traffic engineering in OpenFlow Data Centers networks". IEEE Network Operations and Management Symposium (NOMS), May 05-09, 2014.
- [32] D. Adami, B. Martini, <u>M. Gharbaoui</u>, G. Antichi, P. Castoldi and S. Giordano "Effective resource control strategies using OpenFlow in cloud data center". IFIP/IEEE International Symposium on Integrated Network Management (IM), May 27-31, 2013.
- [33] <u>M. Gharbaoui</u>, F. Paolucci, A. Giorgetti, B. Martini, and P. Castoldi "Guaranteeing confidentiality in multi-domain networks: The PCE Anomaly Detector (PAD)". IFIP/IEEE International Symposium on Integrated Network Management (IM), May 27-31, 2013.
- [34] <u>M. Gharbaoui</u>, B. Martini, R. Bruno, L. Valcarenghi, M. Conti, and P. Castoldi "Policies for efficient usage of an EV charging infrastructure deployed in city parking facilities". International Conference on ITS Telecommunications (ITST), November 05-07, 2013.
- [35] M. Gharbaoui, B. Martini, R. Bruno, L. Valcarenghi, M. Conti, and P. Castoldi "Designing and Evaluating Activity-Based Electric Vehicle Charging in Urban Areas". IEEE International Electric Vehicle Conference, October 23-25, 2013.
- [36] <u>M. Gharbaoui</u>, B. Martini, W. Cerroni, P. Castoldi and F. Callegati, "Network resource allocation in data center interconnection with anycast service provisioning", IEEE Global Communications Conference (Globecom), 2012.

- [37] M. Gharbaoui, L. Valcarenghi, B. Martini, P. Castoldi, R. Bruno and M. Conti"Effective management of a public charging infrastructure through a smart management system for electric vehicles", IEEE International Energy Conference and Exhibition (ENERGYCON), September 09-12, 2012.
- [38] <u>M. Gharbaoui</u>, F. Paolucci, A. Giorgetti, B. Martini, and P. Castoldi "Statistical Approach Detecting Malicious PCE Activity in Multi-domain Networks". IEEE Conference on High Performance Switching and Routing (HPSR), June 24-27, 2012.
- [39] <u>M. Gharbaoui</u>, L. Valcarenghi, R. Bruno, B. Martini, M. Conti, and P. Castoldi "An Advanced Smart Management System for Electric Vehicle Recharge". IEEE International Electric Vehicle Conference, March 4-8, 2012.
- [40] <u>M. Gharbaoui</u>, B. Martini, P. Castoldi "Dynamic Network Resource Allocation for Inter-Data Centers Communications". Optical Fiber Communications (OFC) conference, March 2012. (Corning Outstanding Student Paper Competition semi-finalist).
- [41] B. Martini, W. Cerroni, M. Gharbaoui, A. Campi, P. Castoldi, F. Callegati, "Integrated signaling framework for joint reservation of application and network resources for Future Internet", IEEE Global Communications Conference (Globecom), 2011.
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- [45] W. Cerroni, B. Martini, <u>M. Gharbaoui</u>, A. Campi, F. Baroncelli, P. Castoldi, F. Callegati: "SIP-Based Self Configuration of Network Resources for Future Internet Application Services". Future Network & Mobile Summit. Florence, Italy 16 18 June 2010.
- [46] W. Cerroni, B. Martini, M. Gharbaoui, A. Campi, F. Baroncelli, P. Castoldi, F. Callegati "Experimental Validation of a SIP-Based Platform for Service Oriented Optical Network". Optical Fiber Communications (OFC) conference, March 2010.

Pisa, December 2022

Molka Gharbaoui