

Roberto Minerva

CURRENT ACTIVITIES AND EXPERIENCE

MAITRE DE CONFERENCES EN SOFTWAREZATION | TELECOM SUDPARIS | FROM OCTOBER 2018

- Carrying out research in the area of IoT and service architectures. Application of softwarezation to cultural heritage. Network Softwarezation.

INDUSTRIAL INNOVATION EXPERIENCE

- Introduction and deployment of new technologies and services/products in network (e.g., Network call center, NFV/SDN) and new application domains (e.g., e-health, IoT)
- Innovation Management and exploitation of new technologies in an industrial environment
- Consultant for the CTO and CEO offices providing strategic advice on the introduction of new software technologies or services in the Operator network
- Consulting to external companies (Operators) on the introduction of Network Intelligence solutions
- Scenarios development

INDUSTRIAL RESEARCH COOPERATION

- Focal point for industrial relations with University within the Strategy Department of Telecom Italia
- Instrumental to a large cooperative project about Future Cities and Cultural Heritage centered in the FUTURE CENTER in Venice with an international partnership between Telecom Italia, and relevant Universities.
- Responsible for industrial cooperation between Telecom Italia and relevant industrial players such as Lucent, Alcatel and others

Additional activities and responsibilities can be found in the annex (complete CV).

MANAGEMENT SKILLS

- Management of large research organization/lines
- International Project Management

Relevant Activities in Innovation

SOFTWAREZATION

Service Architectures

- Renown expert in Service Architectures for telecommunications. Definition and implementation of large projects in the Network Intelligence field (over 30 years in this sector)
- Responsible for the Network Intelligence Research Line in Telecom Italia Lab
- Responsible for Advanced Architectures in Telecom Italia Future Center
- Responsible for the coordination action within the Strategy Plan of Telecom Italia for Softwarezation activities and Telco transformation
- Co-Author of the Book: "Networks and new Services: a Complete Story"
<http://www.springer.com/us/book/9783319339931>

Network Function Virtualization and Software Defined Networks

- Initiator of Network Function Virtualization activities (author of the ETSI White Paper)
- Technical Leader of the H.2020 SoftFIRE project aiming at supporting experimentations on a Federated Testbed for SDN/NFV/5G
- Responsible in Telecom Italia Strategy Department for promoting internal adoption of SDN/NFV solutions
- Chairman of the First EIT Digital-IEEE Federated 5G/SDN/NFV/MEC Testbed Workshop in San Francisco May 2016

INTERNET OF THINGS

- Chairman of the IEEE Internet of Things Initiative (from 2013 to 2016)
- General Chair of the First World Forum on IoT Conference (March 2014)
- Chairman of the IEEE Working Group on IoT and Cultural Heritage
- Responsible in TI Strategy for the design of IoT architectures and their internal adoption
- Architectural design (e.g., iCore project) of virtualization of sensors and smart objects and Machine Learning applications
- Promoter of the Virtual Continuum concept

BIG DATA AND DATA MANAGEMENT

- Responsible for the Bank of User Data (architecture definition, data exploitation) initiative within Telecom Italia Strategy Department comprising the exploitation by means of AI technologies and Big Data techniques of a “fair usage” of data
- Responsible for the coordination action within the Strategy Plan of Telecom Italia for Big Data activities

Funding

- Under my direct effort or supervision, the research lines have been able to attract funding for several Million euros over the years. The approach was to ensure that at least one European Project was active per year in order to support the research funding. Last projects funded: SoftFIRE, Unify, iCore, Cascadas. They cover NFV/SDN, IoT and autonomic computing areas.

Education

DOCTORIAL DEGREE IN “COMPUTER SCIENCE AND TELECOMMUNICATIONS” | 12 JULY 2013 | TELECOM SUD PARIS IN PARTNERSHIP WITH UNIVERSITE PIERRE ET MARIE CURIE

MASTER DEGREE (LAUREA VECCHIO ORDINAMENTO) IN COMPUTER SCIENCE | 13 MARCH 1987 | UNIVERSITA DEGLI STUDI BARI – ITALY

TEACHING

UNIVERSITY COURSES

- 2012/2013 course: 010MSNQ “New opportunities and challenges in mobile applications” within the second Level University Master in Wireless Systems and Related Technologies - Torino) (40 teaching hours)

- 2011/2012 course 010MSNQ: New opportunities and challenges in mobile applications” within the second Level University Master in Wireless Systems And Related Technologies - Torino) (40 teaching hours)
- November 2017: IoT Course for the Master of Science Communication Networks and Services
- October 2017 “IoT: Sfide Tecnologiche e di Business” SEMINARI della Fondazione MARCHE e UNIVERSITA POLITECNICA delle MARCHE
- November 2017: IoT Course for the Master of Science Communication Networks and Services
- June 2016 short Course on Internet of Things at Universita Politecnica delle Marche
- From November 2017: Internet of Things Course within the Network Intelligence and Data Science Master course of IMT – Telecom Sud Paris

ONLINE COURSES

- 2016: A complete online course on IOT for IEEE

PROFESSIONAL COURSES

- Several teaching courses for Telecommunications professionals within the Scuola Superiore Guglielmo Reiss Romoli (part of Telecom Italia) on Network Intelligence, Service Architectures
- Several Courses about innovation and new technologies within the educational activities of Telecom Italia

Publications

More than 50 publications in peer reviewed journals or conferences

Some relevant publications are:

1. Moiso, C; Minerva, R.; Towards a User-Centric Personal Data Ecosystem – The Role of the Bank of Individuals’ Data, in Proceedings 2012 16th Int. Conf. Intelligence in Next Generation Networks: Realising the power of the network; Enabling the Internet of everything (ICIN 2012), 8-10 October 2012, Berlin (Germany), 202-209, ISBN 978-1-4673-1525-8, IEEE Xplore. Best Paper Award.
2. Minerva, R.; Moiso, C.; Manzalini, A.; and Crespi, N.; "Virtualizing Platforms." In Evolution of Telecommunication Services, pp. 203-226. Springer Berlin Heidelberg, 2013.
3. Manzalini, A.; Minerva, R.; Crespi, N.; Emad, U.; "Software Networks at the Edge." Evolution of Cognitive Networks and Self-Adaptive Communication Systems (2013): 199.
4. Manzalini, A.; Minerva, R.; Callegati, F.; Cerroni, W.; Campi, A.; "Clouds of virtual machines in edge networks." Communications Magazine, IEEE 51, no. 7 (2013): 63-70.
5. Minerva, R. "From Internet of Things to the Virtual Continuum: An architectural view." Euro Med Telco Conference (EMTC), 2014. IEEE, 2014.
6. Piuri, V.; Minerva, R.; "Building the Internet of Things," Computing Now, vol. 8, no. 7, July 2015, IEEE Computer Society [online]; <http://www.computer.org/web/computingnow/archive/building-the-internet-of-things-july-2015>.
7. Minerva, Roberto, Abyi Biru, and Domenico Rotondi. "Towards a definition of the Internet of Things (IoT)." IEEE Internet Initiative 1 (2015), available at <http://iot.ieee.org> (more that 1000 downloads)
8. Minerva, R.; Crespi, N.; "Networks and new Services: a Complete Story" Springer ISBN: 978-3-319-33993-1 Springer, 2017