Europass
Curriculum Vitae

Personal information

Surname(s) / First name(s)	**Manetti, Vittorio**
Address(es)	Via Solfatara, 60 - 80078 - Pozzuoli (NA), Italy
Telephone(s)	081 19007780 Mobile: 366 5274088
Email(s)	vit.manetti@gmail.com
Nationality(-ies)	Italian
Date of birth	27th of August 1979
Gender	Male

Work experience

Dates	January 2016 to present
Occupation or position held	Software Engineer at Leonardo
Main activities and responsibilities	*Software Verification Manager*

Responsible for the Verification and Validation of Core Business Applications. Vittorio is team leader and responsible for activities related to the verification of software components belonging to the area "Surveillance Data Processing Solutions".

The "Security and Information Systems" division in Leonardo, aims at designing and supplying advanced solutions and services for Security, systems and applications for Critical Infrastructures, as well as solutions (in use worldwide) for the Air and Maritime Traffic Control. With reference to the ATC (Air Traffic Control) field, the Surveillance system is in charge of managing raw data directly coming from sensors (such as: PSR, SSR, Mode S Stations and ADS-B Ground Stations, Ground Vehicle Processors), with the purpose of firstly generating Mono Sensor Tracks, and then of correlating and fusing them in Multi Sensor Tracks. Aim of the process is to provide in a synthetic picture the whole situation of the Air and/or Surface Traffic over a controlled area.

The Software Verification activities on Surveillance Data Processing Solutions rely on mechanisms that are completely automated, accordingly on the use of tools for the design, the scheduling and the execution of automated test procedures, as well as on the use of a toolchain that supports the software requirements management. The Software Verification involvement takes place during the entire software development process, and it can be divided into the following steps: Software requirements revision; Early testing (with the goal to make easy the anomaly detection during the development phase); Formal acceptance test; Non regression analysis.

As Team Leader and responsible for the Software Verification activities, Vittorio is in charge of managing a team of resources, of budgeting and scheduling activities for each of the aforementioned steps, as well as of attending directly on the implementation of such activities.

Name and address of employer	Leonardo Spa - Via Circumvallazione Esterna, loc. Pontericcio, c/o SELEX-ES - 80014 Giugliano in Campania (NA)
Type of business or sector	Aerospace, Defense and Security

Dates	January 2015 to December 2015
Occupation or position held	Software Engineer at SELEX-ES (a Finmeccanica Company)
Main activities and responsibilities	*Software Verification Manager* Team leader and responsible for activities related to the verification of software components belonging to the area "Surveillance Data Processing Solutions". Managing a team of resources; budgeting and scheduling of activities; direct involvement on the Software Verification activities.
Name and address of employer	SELEX-ES - Via Circumvallazione Esterna, loc. Pontericcio, c/o SELEX-ES - 80014 Giugliano in Campania (NA)
Type of business or sector	Defense electronics and Security
Dates	March 2011 to December 2014
Occupation or position held	Researcher at SESM (a Finmeccanica Company)
Main activities and responsibilities	*V&V Manager*. Responsible for the Verification and Validation of SELEX-ES software components, with particular reference to the area "Surveillance in ATC". Involved as team leader in the "Quality Restoration" project founded by Finmeccanica. *Project Manager of EPOCA (Sesm Private Cloud Computing Enterprise Platform)*, a research project on Cloud security born from a collaboration among Sesm, Selex-ES and the University of Napoli "Federico II". Aim of the project is the design and implementation of security mechanisms both concerning infrastructural and behavioral aspects, for Cloud Computing platforms that host complex distributed systems. *Involved in COSMIC*, a Public/ Private research center on Open Source systems for Mission Critical applications and services, funded by the Italian Ministry of Research. Supervisor for the Training on the Job activities related to the SVEVIA Farm project, one of the three projects under the COSMIC research center. Such activities are aimed at realizing a platform for the automation of testing procedures on software components belonging to the area "Surveillance in ATC". *Network Administration, Cybersecurity and Cloud Infrastructure*. Supervisor for activities related to the technical improvement of the SESM's Network Architecture. *Organizer and TPC member* for the first and the second edition of the Jamaica workshop, "Joining AcadeMia and Industry Contributions to Test Automation and Model based Testing".
Name and address of employer	SESM S.c.a.r.l. - Via Circumvallazione Esterna, loc. Pontericcio, c/o SELEX-ES - 80014 Giugliano in Campania (NA)
Type of business or sector	Research and Development in the field of Defense electronics and Security
Dates	July 2009 to February 2011
Occupation or position held	Researcher at CRIAI
Main activities and responsibilities	*Team leader for R&D activities* related to the improvement of a legacy system for the Network Inventory. In collaboration with Telecom Italia. *Team leader for R&D activities* aimed at realizing Location-based Tourism services, delivered through Smart Phones. In collaboration with ITS Spa. Involved in the following research projects: *SHARE* (Sharing Open Source Software Middleware to improve industry competitiveness in the embedded systems domain) - Support Action funded by the European Community under the Seventh Framework Program. *PASION* (Psychologically Augmented Social Interaction Over Network) - Large Scale Integrated Project funded by the European Community under the Sixth Framework Program. *INDACO* (INternet Distributed Architecture for reliable and scalable Conferencing) - Research project funded by the Italian Ministry for Research.
Name and address of employer	CRIAI S.c.a.r.l. - P.le Enrico Fermi 1, loc. Granatello - 80055 Portici (NA)
Type of business or sector	Research and Development in the Information Communication Technology field

Dates	March 2009 to June 2009
Occupation or position held	Postdoc at University of Naples "Federico II"
Main activities and responsibilities	Involved in CONTENT (Content Networks and Services for Home Users), a Network of Excellence funded by the European Community under the Seventh Framework Program. The CONTENT project targeted a key area of Information Society Technologies, namely Content Delivery Networks for Home Users, as an integral part of Networked Audio-Visual System and Home Platforms. The overall goal of the CONTENT project was to integrate the research efforts of the members to address the technical challenges at the different system levels to enable easy-to-install and easy-to-use AV services in and between homes.
Name and address of employer	University of Napoli "Federico II", Computer Science and Systems Department (now DIETI) - via Claudio, 21 - 80125 - Napoli
Type of business or sector	Research

Education and training

Dates	November 2005 to December 2008
Title of qualification awarded	Ph.D. in Computer and Automation Engineering
Principal subjects/Occupational skills covered	Main research topics: Service mobility support for modern networked systems Traffic Engineering mechanisms for MPLS Networks Distribution of multimedia content in Community Networks Involved in the following R&D projects: *INSPIRE* (Increasing Security and Protection through Infrastructure Resilience) – STREP project funded by the European Community under the Seventh Framework Program. *CONTENT* (Content Networks and Services for Home Users) - Network of Excellence funded by the European Community under the Seventh Framework Program. *ONELAB* (Open NEtworking LABoratory supporting communication network research across heterogeneous environments) - STREP project funded by the European Community under the Sixth Framework Program. *NETQOS* (Policy based Management of Heterogeneous Networks for guaranteed) - STREP project funded by the European Community under the Sixth Framework Program. Ph.D. thesis: *"A New Paradigm for Modern Network Services, the Service Switching"*.
Name and type of organization providing education and training	University of Napoli "Federico II"
Level in national or international classification	ISCED97 - 6
Dates	September 1999 to October 2005
Title of qualification awarded	Laurea, Computer Science Engineering
Principal subjects/Occupational skills covered	Thesis: *"Design and implementation of a Splitting mechanism on MPLS networks with the Traffic Engineering support"*.
Name and type of organization providing education and training	University of Napoli "Federico II"
Level in national or international classification	ISCED97: 5A

Personal skills and competences

Mother tongue(s) | **Italian**

Other language(s)

Self-assessment
European level[(*)]

	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
Inglese	B2 Independent user	B2 Independent user	B2 Independent user	C1 Proficient user	C2 Proficient user

[(*)] *Common European Framework of Reference (CEF) level*

Social skills and competences

Innovation and cutting-edge technologies. Communication, leadership, coordination of projects and human resources. Understanding of issues and problem solving. Always enthusiastic to meet new challenges.

Technical skills and competences

Air Traffic Control systems
Software Verification
Cybersecurity
Cloud Security
Project Management
Network Administration
Drafting of R&D Project proposals

Computer skills and competences

General purpose Operating Systems
Microsoft Operating Systems. UNIX e UNIX like systems (FreeBSD, Linux).

Real-time Operating Systems
LynxOS

Programming languages
Procedural and Object oriented programming languages: C, C++, Java. Linux Shell scripting

Development Environments
Eclipse, Microsoft Visual Studio.

Cloud Computing
IaaS: Open Nebula, Open Stack. Networking and Storage: OpenFlow, OpenvSwitch, OpenFiler.

System-level Virtualization
KVM (Kernel-based Virtual Machine), VMWare ESX, VirtualBox.

Networking and Administration
CISCO IOS, pfSense, Altiris Deployment Console, Artica Proxy Server, ZeroShell Captive Portal.

Network Emulators
WANEM (Wide Area Network Emulator), CORE (Common Open Researcj Emulator).

Software life-cycle management
IBM Rational DOORS, IBM Rational Quality Manager, IBM Jazz.

Software Testing
Valid.

Additional information

From February 2008 to July 2008
Ph.D. Student Visitor
Long term scientific mission at the Lancaster University. Collaboration with Professor Andreas Mauthe and his research team on research topics related to the CONTENT Network of Excellence, with particular reference to the distribution of multimedia content in Community Networks.

Publications

Chapters in Books

G. Carrozza, V. Manetti, A. Marotta, R. Canonico, and S. Avallone, *Exploiting SDN Approach to Tackle Cloud Computing Security Issues in the ATC Scenario*, vol. 7869/2013, EWDC 2013 Workshops: Dependable Computing of *Lecture Notes in Computer Science*, pp. 54–60.
Springer, 2013.
ISBN: 978-3-642-38788-3

V. Manetti, P. Di Gennaro, R. Bifulco, R. Canonico, and G. Ventre, *Dynamic Virtual Cluster Reconfiguration for Efficient IaaS Provisioning*, vol. 6043/2009, Euro-Par 2009 Workshops: Parallel Processing of *Lecture Notes in Computer Science*, pp. 424–433.
Springer Berlin / Heidelberg, 2009.
ISSN:0302-9743, 1611-3349; ISBN: 978-3-642-14121-8

R. Canonico, P. Di Gennaro, V. Manetti, and G. Ventre, *Virtualization Techniques in Network Emulation Systems*, vol. 4854/2008, Euro-Par 2007 Workshops: Parallel Processing of *Lecture Notes in Computer Science*, pp. 144–153.
Springer Berlin / Heidelberg, 2008.
ISSN:0302-9743, ISBN:978-3-540-78472-2

R. Canonico, P. Di Gennaro, V. Manetti, and G. Ventre, *Network Emulation on Globus-based Grids: Mechanisms and Challenges*, vol. Grid Enabled Remote Instrumentation of *Signals and Communication Technology*, pp. 455–468.
Springer US, 2008.
ISSN:1860-4862, ISBN:978-0-387-09662-9

Z. Meng, J. Su, and M. V, *A New Precomputation Scheme for MPLS Traffic Engineering Routing*, vol. 4308/2006, Distributed Computing and Networking of *Lecture Notes in Computer Science*, pp. 391–396.
Berlin: Springer, 2007.
ISBN/ISSN: 978-3-540-68139-7/0302-9743, doi: 10.1007/11947950

International Conference Proceedings

M. Ficco, L. Battaglia, G. Avolio, and V. Manetti, "Hybrid simulation of distributed large-scale critical infrastructures," in *Intelligent Networking and Collaborative Systems (IN-CoS 2014), International Conference on*, pp. 616–621, IEEE, 2014

G. Carrozza, L. Battaglia, V. Manetti, A. Marotta, R. Canonico, and S. Avallone, "On the evaluation of vm provisioning time in cloud platforms for mission-critical infrastructures," in *Cluster, Cloud and Grid Computing (CCGrid), 2014 14th IEEE/ACM International Symposium on*, pp. 802–810, IEEE, 2014

A. Marotta, G. Carrozza, L. Battaglia, P. Montefusco, and V. Manetti, "Applying the secram methodology in a cloud-based atm environment," in *Availability, Reliability and Security (ARES), 2013 Eighth International Conference on*, pp. 807–813, IEEE, 2013.
DOI:10.1109/ARES.2013.108

V. Manetti and L. M. Petrella, "Fitness: a framework for automatic testing of asterix based software systems," in *Proceedings of the 2013 International Workshop on Joining AcadeMiA and Industry Contributions to testing Automation*, pp. 71–76, ACM, 2013.
ISBN: 978-1-4503-2161-7; DOI:10.1145/2489280.2489292

A. Marotta, G. Carrozza, S. Avallone, and V. Manetti, "An openflow-based architecture for iaas security," in *Proceedings of the 3rd International Conference on Application and Theory of Automation in Command and Control Systems*, pp. 118–121, ACM, 2013.
ISBN: 978-1-4503-2249-2; DOI:10.1145/2494493.2494510

G. Carrozza, M. Loffreda, and V. Manetti, "Exploiting cloud computing for enabling distributed testing of complex systems: The selex-si roadmap," in *System of Systems Engineering (SoSE), 2012 7th International Conference on*, pp. 350–355, IEEE, 2012.
ISBN: 978-1-4673-2974-3; DOI:10.1109/SYSoSE.2012.6384142

R. Bifulco, R. Canonico, G. Ventre, and V. Manetti, "Transparent migration of virtual infrastructures in large datacenters for cloud computing," in *Computers and Communications (ISCC), 2011 IEEE Symposium on*, pp. 179–184, IEEE, 2011.
ISSN: 1530-1346; DOI:10.1109/ISCC.2011.5984013

V. Manetti, R. Canonico, W. de Donato, G. Ventre, A. Mauthe, and G. Tyson, "Next generation cdn services for community networks," in *Proceedings of the Third International Conference on Next Generation Mobile Applications, Services and Technologies*, (Wales, UK), pp. 89–94, IEEE, September 2009.
ISBN: 978-0-7695-3786-3

V. Manetti, R. Canonico, G. Ventre, and I. Stavrakakis, "System-level virtualization and mobile ip to support service mobility," in *Proceedings of the International Conference on Parallel Processing Workshops*, (Austria), pp. 243–248, IEEE, September 2009.
ISBN: 978-0-7695-3803-7

S. Avallone, V. Manetti, M. Mariano, and S. P. Romano, "A splitting infrastructure for load balancing and security in an mpls network," in *Proceedings of the 3rd International Conference on Testbeds and Research Infrastructure for the Development of Networks and Communities, TridentCom 2007*, (Orlando, USA), pp. 1–6, IEEE, May 2007.
ISBN/ISSN:978-1-4244-0739-2, DOI:10.1109/TRIDENTCOM.2007.4444681

Posters

G. Carrozza, V. Manetti, and L. M. Petrella, "Automatic testing of software components for atc," in *Euromicro International Conference on Parallel, Distributed and Network-Based Processing*, (Belfast, Northern Ireland), 2013

G. Carrozza, V. Manetti, S. Avallone, R. Canonico, and A. Marotta, "Openflow as a security enabling solution in large scale networked systems," in *Proceedings of InfQ 2013*, (Sorrento, Italy), 2013

V. Manetti, R. Canonico, W. de Donato, and G. Ventre, "Servizi di content delivery per comunità di utenti," in *Proceedings of the Conference GARR 2009 "Network Humanitatis - linguaggi, risorse, persone"*, (Italy), September 2009

V. Manetti, "An architecture for selective caching and content distribution as an on-demand service for communities," in *Proceedings of the 6th Mediterranean ad Hoc Networking Workshop*, (Corfu, Greece), June 2007

R. Canonico, V. Manetti, and V. G., "Migration approaches to support nomadic services for communities," in *Proceedings of the Ph.D. Student Workshop, in conjunction with the 3rd Plenary Meeting of the CONTENT Network of Excellence (FP6-2006-IST-507295)*, (Madrid), February 2007