

Europass Curriculum Vitae



Personal information

Surname(s) / First name(s)

Massimiliano Masi, M.Sc., Ph.D.

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Homepage(s)

<http://www.mascanc.net/>, GitHub <http://github.com/mascanc>

LinkedIn profile(s)

<http://www.linkedin.com/in/massimilianomasi>

Nationality(-ies)

Italian

Date of birth

28 August 1978

Gender

Male

Summary

Massimiliano Masi received his M.Sc. in Computer Science, and his Ph.D. from the University of Florence in the field of Formal Methods for Cybersecurity. He is working in Cybersecurity for Critical Infrastructures since 2007. Dr. Masi participated in large projects involving 30+ organisations (public & private) in EU, US, and Africa. He has been working for 15+ years in the eHealth domain as expert for ENISA, the EU, and the Austrian Ministry of Health. Actually his interests are in Cybersecurity of Transport, such as Intelligent Transport Systems, OT Systems, and C-ITS, with a particular focus on interoperability of Cybersecurity Tools. He is involved in various information sharing initiatives.

**Desired employment/
Occupational field**

Computer Science, Cybersecurity aspects of critical infrastructures

Work experience

Dates	12/2019 →
Occupation or position held	Head of Cybersecurity Architecture & Engineering
Main activities and responsibilities	<p>I am involved in all the projects that ASPI and its subsidiaries (Movyon, Essediesse, Amplia, Tecne) perform. As Head of Cybersecurity Architecture and Engineering I manage a team to plan, design and architect, and supervise the programs to secure the company's assets (IT, Cloud, OT, and IoT). I am involved in international research activities in Cybersecurity specialized to the transportation systems.</p> <ul style="list-style-type: none">- Responsible for the Cybersecurity stream of the Italian recovery fund (PNRR) in Autostrade, for the procurement and operation of telemetry sensors over viaducts, bridges, and tunnels (2022 -)- Mercury project (https://www.autostrade.it/en/chi-siamo/mercury): design and define all the cybersecurity aspects for the 1.7 Billion project that Autostrade started to renew the infrastructure (2021 -)- C-ITS Cybersecurity expert in the subgroup of the EU Commission (DG MOVE) (https://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=1941) (2020 -)- Responsible for the security of Collaborative Intelligent Transportation Systems (C-ITS) stations over 3300 km of Italian Motorways, the <i>Smart Road</i>. (2020 -)- Italian representative in the Task Force 1 (Cybersecurity) of the EU project C-Roads (https://www.c-roads.eu). (2021 -)- Stream leader of the Cybersecurity Task Force in NAPCORE (https://www.napcore.eu), with the aim to provide the security for the National Access Point (System with high criticality according with EU 2022/2555). (2021 -)- Stream leader of the ASECAP COPER3 Cybersecurity Task Force, with the aim to harmonize NIS2 implementation in Europe (2023 -)- Cybersecurity for I-IoT and OT Critical Infrastructures: (electronic) fee collection / tolling systems, tunnels / SCADA, viaducts and overpass. Introducing Cybersecurity and safety aspects of all the Italian tunnels under concession, where I introduced a IEC 62443-2-1 Cybersecurity Management System (CSMS), and a set of countermeasures guided by IEC 62443-3-3 and the NIST Cybersecurity Framework. I facilitate the 200 million-digital transformation plan of the company, through applying Cybersecurity by design to all the projects. (see, e.g., Argo https://www.ilsole24ore.com/art/nel-piano-lavori-autostrade-33-miliardi-non-coperti-tariffe-ACAvniCB). (2019 -)- Lead research project for the introduction of Blockchain technology for the inspection processes in the company (https://www.bimportale.com/autostrade-aspi-usa-la-blockchain-le-ispezioni-ponti-gallerie/, and https://aws.amazon.com/it/blogs/database/notarize-documents-on-the-ethereum-blockchain/) (2021 - 2022)- Introduced the usage of Enterprise Architectures (TOGAF, and RAMI 4.0) in the company, to make technologically sustainable Cybersecurity architectures. This task has been used as thesis for the EMBA in Cybersecurity Management. (2021)- Panelist for the Energy Shield project http://www.mascanc.net/eshield.pdf, https://www.youtube.com/watch?v=McifpS9BBy8 (2:07:30). (2021)

Main activities and responsibilities	(Continued)
	<ul style="list-style-type: none"> - Security code reviewer for company's critical software (2019 - 2021) - UNI nominated expert in ETSI, CEN, and ISO (2019 -)
Name and address of employer	Keywords: IEC 62443, ISO 27001, CEN 278, ETSI TC ITS, SCADA Security Autostrade Per L'Italia SPA http://www.autostrade.it
Type of business or sector	Computer Science / Information Technology

<p>Dates</p> <p>Occupation or position held</p> <p>Main activities and responsibilities</p>	<p>04/2007 → 11/2019</p> <p>Security Architect, Researcher, Developer</p> <p>Security architect for eHealth initiatives/Cloud PaaS, in Europe, in the U.S.A., and in South Africa. Consultant for the Austrian Ministry of Health. Developer for critical infrastructures.</p> <ul style="list-style-type: none"> - In 2008 I participated in the definition of security requirements and measures for phase-0 of the eHR.ZA, a national eHealth project held by the South African government for sharing medical data (e.g., DICOM images, CDA documents patient summaries). In the scope of this project, I participated in the definition of the initial infrastructure; - In 2009 I specified the security requirements and measures of the eGP-EGOR project in Upper Austria. This project currently exchange CDA documents for 1.5 million of patients, connecting Upper Austria and Tyrol; - Since 2008 I am actively participating and contributing to the development of the IHE IT Infrastructure technical framework (http://www.ihe.net). I contributed to the development of the IUA, XUA and XUA++ profiles, and I co-authored the Cross Community Fetch (XCF) and asynchronous communications through AS4 profiles. I participating in connectathons since 2006 and I am active in the ITI Committee; - In 2009-2012 I have been an active contributor of the security architecture for the epSOS project (http://www.epsos.eu), a pan-European network for sharing patient summaries and ePrescriptions among EU member states. I co-authored deliverables 3.4.2 (software architecture), 3.7.2 (security services), 3.10.1 (implementation), and 3.A (software architecture for epSOS-II). I have been leading the Core team of the Security Expert Group; - In 2009 I developed the ATNA profile (audit trails and audit record repository). The implemented audit record repository is actually the ARR for the epSOS participating nations, for the South African eHR.ZA Proof-of-Concept, and in various initiatives in Europe and in the U.S.A.; - Since 2008 I am the developer of an Identity Management solution for eHealth projects (based on XUA, XUA++, SAML, XACML, XSPA, and the HI7 RBAC catalogue) actually in production in Upper Austria and in some epSOS participating nations. This software has been used for 10 IHE connectathons as the official identity provider to certify vendors; - In 2009-2012 I have been in the leading team (the Fraunhofer/ELGA team) for the deployment of the epSOS software in EU participating nations; - Since 2011 I act as security consultant for the Austrian National Authority and ELGA GmbH. I contributed to the development of the austrian national eHealth infrastructure; - In 2011 I participated in the development of the security measures for authentication and patient consent management for the Holyoke Medical Center, in Holyoke, MA (U.S.A.). MEDITECH interoperability; - Strong knowledge of the U.S. DIRECT project specifications (S/MIME 3.2, XDR, Security) and DIRECT interoperability. In 2012 I implemented the Tiani-Spirit Hisp-in-a-box (deployed in Maryland and in Pennsylvania);
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- Trainer. I teach in official Tiani "Spirit" trainings for new business partners and investors in general Network Security and Protocols, ISO 28380 (IHE adoption), IHE methodology and profiles, Software. Courses made in Boston, London, Vienna;
- In 2011 I was a member of the OASIS Trust Elevation Technical Committee, in which I participate to the specification of standard methodologies for elevating authentication and authorization procedures. My focus was to use such techniques for Healthcare Emergency Treatments;
- In 2012-2016 I have been representing eHealth sector within the e-SENS, European Interoperability Framework (EIF), and eHGI european initiatives. In these projects I was responsible moderator for the national adoption of the new European regulation for eID and eSignature (the eIDAS, under the eHGI); eHealth consultant for the EIF, and epSOS technology representative in e-SENS. In particular my task in this e-SENS project was to bring the european eHealth infrastructure to the European Digital Single Market. I have been leading various security-related task forces and I act as IT reference architect for the member states piloting in the e-SENS, for which I participated in the definition of the CEF building blocks relevant for eHealth. Interview made for ePractice.eu: <https://www.youtube.com/watch?v=ktRdUMfuDz0>;
- In 2013 I started a survey software interoperability and IT security for Energy (ENTSOE) and Gas (ENTSOG). In particular I have been studying on a possible adaptation of the ISO/TC 215 methodology to Smart Grids. I am a influencer of the IES project, <http://www.smartgrids.at/plattform-aktivitaeten/ies-integrating-the-energy-system-austria.html>;
- In 2014 I led the Healtheway certification program (<http://healthewayinc.org>) for Inland Northwest Health Services (<https://www.inhs.info>). I discovered and patched several bugs of the security of the CONNECT open source (<https://connectopensource.atlassian.net>, not yet released, at the time of writing). The outcome of this program has been used as consultancy by Trillium Bridge project (<http://www.trilliumbridge.eu>);
- In 2014 I played the role of IT Agile Security Architect and Developer in the Consent2Share consortium (<http://wiki.siframework.org/SAMHSA+Consent2Share+Project>), coordinating Tiani Spirit resources under a strict agile processes. This project aims at interconnecting different security and semantics domains under the Maryland legislation;
- Since January 2016 I am in the technical committee of the OpenNCP. My main task is to refactor the implementation to align it to the epSOS specifications. <http://openncp.atlassian.net>, <https://bitbucket.org/openncp/ehealth>;
- In 2016 I have been leading the task of the eIDAS Regulation adoption in the eHealth domain across europe, suggesting technical solutions discussed by the eHN (http://ec.europa.eu/health/ehealth/policy/network/index_en.htm). I have been coordinating the international pilots between the EU Commission, Austria, Italy, Portugal, and Greece https://ec.europa.eu/cefdigital/wiki/pages/viewpage.action?pageId=59180197&preview=%2F59180197%2F55885025%2F5e-SENS-eHealth-eID-technical_feasibility_report-v1.0.pdf;

(Continued)

- In June 2016 I have been a consultant for ENISA (expert in the list M-CEI-17-T01), the European Union Agency for Network and Information Security. I have conducted a study on eHealth and Cloud security. Partial information can be found here: https://ec.europa.eu/eusurvey/runner/ENISA_eHealth_and_Cloud. In December 2019 I co-authored a publication for the Cybersecurity act;
- Since 2017 I am working as a facilitator to bring the CEF eDelivery building block in the healthcare domain by promoting the AS4 profile in the IHE http://wiki.ihe.net/index.php/ITI_Planning_Committee_2017/2018_Meetings and <https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/2018/08/23/AS4+Published+in+IHE+Technical+Publication>. CEF Interview: <https://ec.europa.eu/cefdigital/wiki/pages/viewpage.action?pageId=78552131>;
- Together with the Hyper e-Health Team (University of Southampton / Tiani) I have been leading the work for adopting the Hyperledger Fabric private blockchain to solve the problem of data provenance in healthcare. This work has been selected as finalist for the *provenance challenge* from the Office of the National Coordinator (ONC) in USA <https://www.cccinnovationcenter.com/challenges/provenance-challenge/> and <https://medium.com/cybersoton/decentralised-provenance-for-healthcare-exchange-services-b9000>;
- I am the technical and security advisor for two blockchain initiatives, <https://www.grapevineworldtoken.io>, and <https://www.jdctoken.io>. I am the technical lead of the Microsoft-Southampton-Grapevine-Tiani pilot <http://www.adnkronos.com/immediapress/ict/2018/07/31/blockchain-based-pilot-for-exchange-clinical-data-announced-gr-32Zifs7Gb5Fn7AF3IS0cCN.html> and <https://azure.microsoft.com/it-it/blog/improve-collaborative-care-and-clinical-data-sh>;
- Finalist of the blockchain contest <https://www.bundesgesundheitsministerium.de/en/blockchain.html> started by the Federal Ministry of Healthcare of Germany;
- I have been invited as speaker in some events, e.g., the eHealth Forum in Athens (2016, <http://www.ehealthforum.org/speaker/massimiliano-masi/>), the HIMSS Asia-Pacific conference in Brisbane (2018, <https://www.himssasiapacconference.org/ehome/287692/753033/>), the IEEE Blockchain Forum in Glasgow (2018, <https://blockchain.ieee.org/standards/clinicaltrialeurope18>), eHealth, Vienna (2018, <http://www.ehealth20xx.at/program-blockchain/>), IEEE/ISTO Blockchain in Healthcare Global (2018, <https://ieee-isto.org/>, <http://www.mascanc.net/ISTO.png>);
- I 2017 I have been part of the IEEE standardisation activity 2418.6 - Blockchain in Health and Life Sciences <https://sagroups.ieee.org/2418-6/>, and I am involved in a IEEE Pilot activity on blockchain and clinical trials;
- I have been teaching the *Protocol Security* module (30 hours) of the I.F.T.S. course *Cyber Security Specialist* in collaboration with Regione Toscana and Polo Universitario di Prato (2018)
- From Jan 2019 to May 2021 I have been advisor for the Deutsche Gesellschaft Fuer International Zusammenarbeit (GIZ) GmbH (the German Agency for the International Cooperation), for the establishment of Electronic Healthcare in Sénégal and Ghana under grant number 19.4934.6-001.02

Keywords: eHealth projects, Network Security, Blockchain IHE, HI7, SAML, XACML, XSPA, XUA, ATNA, Akka, Java.

Name and address of employer	Tiani "Spirit" GmbH, Guglgasse 6. Gasometer A, 1110 Wien, Austria / Europe http://www.tiani-spirit.com , +43 66 48 40 64 96
Type of business or sector	Computer Science / Information Technology for the Healthcare Enterprises
Dates	02/2007 - 04/2007
Occupation or position held	C software developer
Main activities and responsibilities	C++ developer for ACX IBM libraries Keywords: C, C++, AIX, ACX, software engineering
Name and address of employer	Savino del Bene IT consulting, Via Gozzoli Benozzo, 5/2, 50018 Scandicci (Florence) http://www.sdb.it
Type of business or sector	Computer Science / Information Technology
Dates	01/2006 - 12/2006
Occupation or position held	IPMIToolSuite developer, Grid computing developer, Network Security developer
Main activities and responsibilities	Grid services and IPMI developer, user authentication solutions for the LHC computing GRID Keywords: SPNEGO, GSSAPI, PKI, SSL, Grid Computing, IPMI, Ipmitool, OpenIPMI, linux kernel 2.6, SLC4, Grid certificates management, Perl, Java, C++, Virtual Organizations
Name and address of employer	CERN, CH-1211 Geneve 23, Switzerland, http://www.cern.ch , https://twiki.cern.ch/twiki/bin/view/FIOgroup/TsiSection
Type of business or sector	Computer Science / Research
Dates	01/2004 - 03/2012
Occupation or position held	Linux and AFS cell administrator
Main activities and responsibilities	Creator and maintainer of the OpenAFS cell <code>pb.unifi.it</code> and mail services for the secretariat of the University of Florence Keywords: Kerberos, AFS, IMAP, Cyrus, apache, postfix, XEN
Name and address of employer	Università degli studi di Firenze - Polo biomedico
Type of business or sector	Computer Science / System Administration
Dates	01/2001 - 01/2007
Occupation or position held	Web developer
Main activities and responsibilities	Web developer for italian public administrations Keywords: PHP, Apache, MySQL
Name and address of employer	Comune di Castelnuovo Berardenga - Via Garibaldi, 4 - 53019 Castelnuovo Berardenga (SI) - tel. 0577-351303 fax 0577-355273
Type of business or sector	Computer Science
Dates	01/2001 - 07/2005
Occupation or position held	Developer
Main activities and responsibilities	Fal.Co S.a.s, a company composed by a team of students and senior developers. I worked as C++ developer Keywords: C/C++, COBOL, Qt, Linux, Progress SQL
Name and address of employer	Fal.CO. S.a.s., di Riccardo Falcucci, 11, via Poggio Bracciolini, 50126 Firenze, Italy
Type of business or sector	Computer Science / System Administration
Dates	01/2000 - 10/2000
Occupation or position held	Chartered Surveyor

Main activities and responsibilities	Chartered Surveyor for the local public administration (Comune di Firenze). I was involved on a major cadastral survey of private buildings in the area of Florence. Here I renewed cadastral maps by performing on-site measurements and technical drawings
Name and address of employer	Comune di Firenze
Type of business or sector	Public Administration

Education and training

Dates	02/2023
Certification Name	UNI EN ISO IEC 27001:2022 Auditor/Lead Auditor
Certification Authority	Bureau Veritas
Dates	11/2020 - 5/2021
Title of qualification awarded	Executive Program in Cybersecurity Management
Principal subjects/Occupational skills covered	Strategy, Organization, and Compliance of Cybersecurity aspects of a big company. Title of the project work: <i>Agile and Digital Transformation Howto</i>
Name and type of organization providing education and training	Politecnico di Milano
Level in national or international classification	Executive program (EMBA or similar). Final result: 30/30
Dates	15/7/2013
Certification Name	ISO IEC 27002:2013 Foundation
Certification Authority	Exin (Bitil.com)
Dates	17/10/2012 - 19/10/2012
Certification Name	ITIL (v3) Foundation
Certification Authority	APMG International (QPR)
Dates	01/2008 - 5/2012
Title of qualification awarded	Ph.D.
Principal subjects/Occupational skills covered	Network Security, Formal Methods applied to security, Formalization of OASIS standards, eHealth security. Title of the thesis: <i>On Authentication and Authorisation Issues in eHealth Systems</i> . As important results I proposed a formal semantics for XACMLv2 and v3, and I discovered a security issue in the IHE specifications.
Name and type of organization providing education and training	Università degli studi di Firenze, Facoltà di Scienze Matematiche Fisiche e Naturali, Dottorato in Informatica e Applicazioni (DIA), XXIII ciclo
Level in national or international classification	Doctor of Philosophy with "Doctor Europæus" mention, Dottorato di Ricerca, menzione di Dottorato Europeo, vote 3/3 (maximum) Note: <i>the Ph.D. course has been sponsored by Tiani "Spirit" GmbH</i>
Dates	07/2007
Title of qualification awarded	Abilitazione all'esercizio della professione di Ingegnere Dell'Informazione
Principal subjects	Ingegneria dell'Informazione
Level in national or international classification	Esame di stato, vote 55/60

Dates	09/1997 - 02/2006
Title of qualification awarded	M.Sc., Master degree in Computer Science
Principal subjects/Occupational skills covered	Numerical Application of the Computer Science, Parallel Programming, Computer Aided Geometric Design, Bioinformatics, Financial Applications, acquisition and treatment of large amounts of numerical data, networking, Web Programming, distributed systems. Title of the thesis: <i>Using Intelligent Platform Management Interface (IPMI) at the LHC GRID</i>
Name and type of organization providing education and training	Università degli studi di Firenze, Facoltà di Scienze Matematiche Fisiche e Naturali, corso di Laurea in Informatica
Level in national or international classification	Master degree in Computer Science / Laurea quinquennale in informatica vecchio ordinamento, pre-riforma, 103/110
Dates	09/1992 - 07/1997
Title of qualification awarded	Diploma di maturità
Principal subjects/Occupational skills covered	Perito Agrario
Name and type of organization providing education and training	Istituto Tecnico Agrario di Firenze
Level in national or international classification	High school degree in Agriculture

Projects

[NAPCORE]	Jan 2021 - Present. National Access Point Coordination Organisation for Europe. Making Mobility Data Flow. NAPCORE is a project to coordinate the European National Access Points (NAPs) and National Bodies (NBs) established under the ITS Directive. My role in the project is to lead the Cybersecurity task force and propose architectural and detailed countermeasures. https://www.napcore.eu
[C-Roads]	Jan 2021 - Present. The C-Roads Platform is a joint initiative of European Member States and road operators for testing and implementing C-ITS services in light of cross-border harmonisation and interoperability. My role in the project is to contribute to the Task Force 1, Cybersecurity aspects. https://www.c-roads.eu/platform.html
[Cyberkit4SME]	Jan 2020 - Aug 2021. CyberKit4SME aims to democratize a kit of cyber security tools and methods enabling SMEs/MEs to: Increase awareness of cybersecurity risks, vulnerabilities and attacks; Monitor and forecast risks; Manage risks using organisational, human and technical security measures with greater confidence; and Collaborate and share information in a collective security and data protection effort. My role in the project was to build the consortium, write the proposal, and lead the involvement of Tiani "Spirit". https://cordis.europa.eu/project/id/883188
[IES]	Jan 2016 - Jan 2018. Integrating the Energy Systems (IES). Interoperability is essential for the success of the energy transition. The project IES Austria will design a modular process chain to secure interoperability among different IT systems an open use-case based method to specify integration profiles from standards and practice a prototype interoperability assessment demonstration fostering agility and cooperation The main issue of this project is the cross-sector knowledge exchange in the transfer of one established methodology from the healthcare domain into the electricity distribution sector. My role in the project was advisor, and technical lead for the development of the new standards. http://www.iesaustria.at
[e-SENS]	Apr 2013 - Jan 2016. The aim of the project is to develop an infrastructure for interoperable public services in Europe. It will support the creation of a Digital Single Market by facilitating the delivery and usage of electronic public services. My role in the project was as IT architect for the cybersecurity aspects (WP6), and coordinator of the international pilots in eHealth (WG5). http://www.esens.eu

- [eHGI] Jan 2012 - Jan 2016. The eHealth Governance Initiative is working to establish a governance structure for eHealth within Europe in order to ensure continuity of healthcare both at home and across borders. It is achieving this through the development of strategies, priorities, recommendations and guidelines designed to deliver eHealth in Europe in a co-ordinated way. This work involves all stakeholders but especially patients and healthcare professionals. My role in the project was as advisor for strategic decisions, supporting the eHealth Network. <http://www.ehgi.eu/>
- [epSOS] Jan 2008 - Jan 2012. epSOS is the main European electronic Health (eHealth) interoperability project co-funded by the European Commission and the partners. It focuses on improving medical treatment of citizens while abroad by providing health professionals with the necessary patient data. My role in the project was to write the specifications for the exchange of Patient Summaries and ePrescription over Europe. Specifications that now are part of national infrastructures. <https://www.epsos.eu>

Publications and Conferences

- [CERN06] H. M. Caçote, M. Masi, *Using the Intelligent Platform Management Interface (IPMI) at the LHC GRID*, published in the (internal) CERN Bulletin (2006), available at <https://twiki.cern.ch/twiki/bin/viewfile/FIOgroup/IpmiRef?rev=1;filename=ipmicern.pdf>. Also accepted for poster sessions in the conferences eScience 2007, and INGRID 2008. Saved as <http://www.mascanc.net/UsingIntelligentPlatformManagementInterfaceattheLHCGrid.html>
- [EMMIT08] M. Masi, M. Meoni, *Using IHE profiles for an healthcare DataGRID based on AliEn*, in EMMIT08, Tripoli, Libya
- [OpenAFS2009] A. Mancini, M. Masi, *OpenAFS and SAML through the web: is it a good idea?*, in Open AFS 2009, Rome, Italy
- [ICISS2009] M. Masi, R. Pugliese, F. Tiezzi, *On secure implementation of an IHE XUA-based protocol for authenticating healthcare professionals*, in Prakash, A., Gupta, I., eds.: ICISS. Volume 5905 of Lecture Notes in Computer Science, Springer (2009) pp 55-70
- [EHEALTH2010] M. Masi, R. Maurer, *On the usage of SAML delegate assertions in an healthcare scenario with federated communities*, in Szomszor, M., Kostkova, P., eds.: eHealth. Volume 69 of LNICST, Springer (2010) pp 212-220
- [HEALTHCOM2011] M. Masi, R. Pugliese, F. Tiezzi, *A Standard-Driven Communication Protocol for Disconnected Clinics in Rural Areas*, in Proceedings of the 13th IEEE International Conference HEALTHCOM 2011, Columbia (MO) pp 304-311
- [AFRICOM2011] M. Masi, R. Pugliese, F. Tiezzi, *e-Health for Rural Areas in Developing Countries: Lessons from the Sebokeng Experience*, in Popescu-Zeletin, R., Jonas, K., Rai, I.A., Glitho, R., Villafiorita, A., eds.: e-Infrastructure and e-Services for Developing Countries (AFRICOM 2011), Zanzibar (Tanzania). Volume 92 of LNICST, Springer (2012), pp 187-196
- [ESSOS2012] M. Masi, R. Pugliese, F. Tiezzi, *Formalisation and Implementation of the XACML Access Control Mechanism*, in Barthe, G., Livshits, B., Scandariato, R., eds.: ESSoS: Engineering Secure Software and Systems, Volume 7159 of Lecture Notes in Computer Science, Springer (2012), pp 60-74
- [JOMS2012] M. Masi, R. Pugliese, F. Tiezzi, *Security Analysis of Standards-Driven Communication Protocols for Healthcare Scenarios*, in Journal of Medical Systems: Volume 36, Issue 6 (2012), pp 3695-3711
- [MDsec 2012] M. Busch, N. Koch, M. Masi, R. Pugliese, F. Tiezzi, *Towards Model-Driven Development of Access Control Policies for Web Applications*, in MoDELS 2012, Model-Driven Security Workshop, pp 4 and following
- [HEALTHINF 2013] A. Margheri, M. Masi, R. Pugliese, F. Tiezzi, *On a Formal and User-Friendly Linguistic Approach to Access Control of Electronic Health Data*, in HEALTHINF 2013, pp 263-268
- [WS-FM 2013] A. Margheri, M. Masi, R. Pugliese, F. Tiezzi, *Developing and Enforcing Policies for Access Control, Resource Usage, and Adaptation: A Practical Approach*, in WS-FM 2013, pp 85-105
- [CISCO2014] M. Masi, A. Timmermann et al., *Big Data in the Public Sector*, in Cisco Blog, <http://blogs.cisco.com/government/public-sector-big-data>

- [Med-e-Tel 2016] F. Wisniewski, D. G. Katehakis, M. Masi, S. Bittins, *Improving Cross-Border European ePrescription and Patient Summary Services through e-SENS Cross-Sectorial Building Block*, Med-e-Tel 2016, https://www.medetel.eu/download/2016/parallel_sessions/presentation/day1/Improving_Cross_Border_European.pdf
- [PHEALTH016] F. Wisniewski, D. G. Katehakis, M. Masi, S. Bittins, *Towards a Cross-domain Infrastructure to Support Electronic Identification and Capability Lookup for Cross-border ePrescription / Patient Summary Services*, pHealth 2016, pp:152-157
- [OVE2016] M. Masi, *A new step for Energy Interoperability*, Ove Aktuell, Aug 2016, <http://www.mascanc.net/ove.pdf>
- [TSE17] A. Margheri, M. Masi, R. Pugliese, F. Tiezzi, *A Rigorous Framework for Specification, Analysis and Enforcement of Access Control Policies*, IEEE Transactions on Software Engineering, Vol 45, Issue 1, Pages 2–33, DOI: 10.1109/TSE.2017.2765640
- [IHIC17] D.G. Katehakis (GR), J. Goncalves (PT), M. Masi (AT), S. Bittins (DE), *Interoperability Infrastructure Services to enable Secure, Cross-Border, Operational eHealth Services in Europe*, Proceedings of the 17th International HL7 Interoperability Conference, pp 40-51, IHIC2017, Oct 2017, ISBN 97896099062-3-4
- [SGC2018] M. Masi, T. Pavleska, H. Aranha, *Automating Smart Grid Solution Architecture Design*, in 018 IEEE International Conference on Communications, Control, and Computing Technologies for Smart Grids, SmartGridComm 2018, Aalborg, Denmark, October 29-31, 2018, pp 1–6, <https://doi.org/10.1109/SmartGridComm.2018.8587457>
- [WiMOB2019] H. Aranha, M. Masi, T. Pavleska, G. P. Sellitto, *Securing Mobile e-Health Environments by Design: A Holistic Architectural Approach*, WiMob 2019, Barcelona, Spain, pp 1-6
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- [DSOGRI19] H. Aranha, M. Masi, T. Pavleska, G. P. Sellitto, *Enabling Security-by-Design in Smart Grids: An Architecture-Based Approach*, EDCC 2019, pp 177-179
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[IEEE CBI2023] M. Masi, *Keynote 1: Securing Critical Infrastructures with a cybersecurity digital twin*, in *IEEE CBI 2023*, Prague. Invited Keynote Speech, <https://cbi2023.org/index.php/program/keynotes>

[IEEE ISSRE2023] M. Masi, *Panel: How to make success out of my Ph.D.*, in *IEEE ISSRE 2023*, Florence, Doctoral Symposium. Invited Keynote Speech, https://issre.github.io/2023/program_doctoral_symp.html

Personal skills and competences

Mother tongue(s)

Other language(s)

Self-assessment European level^()*

English
French

Social skills and competences

Italian

English, French

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C2	C2	C2	C2	C2
B2	B1	B2	B1	A2

^(*)Common European Framework of Reference (CEF) level

I have a proactive character. I like short business travels, everywhere. I enjoy working in international domains. I always been an happy worker-from-home. I have a first level HACCP license (I volunteer as barman) and a First Aid in Pediatric ages qualification and defibrillator (P-BLSD). Accountability, Determination, Analytical mind, Multilingual are some characteristics of my personality. I am capable to build consortia and align partners towards common goals.

Around the year 1996 I co-founded the Firenze Linux User Group (FLUG). I am a reviewer for the *Journal of Medical Systems*, *Journal of Logic and Algebraic Programming*, *Journal of Systems and Software*, *Computational and Structural Biotechnology Journal*, *IEEE Internet of Things Journal*, *Journal of Taibah University Medical Sciences*, *Journal of Information Security and Applications*, and various conferences. I serve as reviewer for the European Commission. My ResearchGate: https://www.researchgate.net/profile/Massimiliano_Masi, my Medium <https://medium.com/@massimilianomasi>.

Honors & Awards

- ACM Computing Reviews December 2021 featured reviewer:
https://www.computingreviews.com/todaysissue/todaysissue_featured.cfm?reviewer_id=123569
https://www.computingreviews.com/browse/browse_reviewers.cfm?reviewer_id=123569
And Blog entry:
<https://ieonline.typepad.com/reviews/2021/12/featured-reviewer-massimiliano-masi.html>
- Finalist of the NIST Provenance Challenge in 2019
<https://medium.com/cybersoton/decentralised-provenance-for-healthcare>
- Finalist of the German Blockchain Awards
<https://www.bundesgesundheitsministerium.de/en/blockchain.html>

Computer skills and competences

- **Programming Languages:** Java and Akka. Other languages such as ANSI C, C++, PHP, SQL, Matlab, Prolog were part of my background.
- **Operating Systems:** Unix (Linux, NetBSD, OpenBSD, FreeBSD, SCO OpenServer, AIX), MS Windows (all versions), Mac OS X
- **Software packages** Eclipse (my favorite tools are ECL-EMMA, SpotBugs, CheckStyle, JMock). Matlab, Octave, Apache, MySQL, AFS (OpenAFS and ARLA), \LaTeX 2e, OpenLDAP, PAM, SAMBA, KerberosV, PVM, MPI, JBoss, Globus, JAX-WS, Axis2, OpenSAML, Shibboleth 2.0, JUnit. I am a fan of TDD, and I follow Meyer's view on Agile.

Artistic skills and competences

I started to play classical guitar in 1997. I studied latin jazz and bossa nova for 6 years.

Sport interests

I like to play baseball, I was third base with CERN's Quarks. Now I am playing with Antella's Turtles. I like hiking and horse riding. I have the first-level coach qualification for junior baseball teams. My other favorite sport is running. I am part of the *CRAL Dipendenti Comunali* sport club, where I am an happy half-marathon runner.

Driving licence(s)

Italian driving license (A, B)

Additional information

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Geneve, Switzerland

Italian Privacy Law

Florence (Italy), Geneve (Switzerland), Vienna (Austria), October 12, 2023

Autorizzo il trattamento dei miei dati personali presenti nel cv ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali" e del GDPR (Regolamento UE 2016/679).

Florence, October 12, 2023

