

CURRICULUM VITAE STUDIORUM

ROBERTO SETOLA

Roberto Setola was born in Naples on January 23rd, 1969 and graduated in Electronic Engineering, with honours, at the University of Naples “Federico II” in 1992 where he also accomplished, in 1996 the Ph.D. in Electronic and Computer Engineering.

Actually, he is full professor at the department of Engineering at the University CAMPUS Bio-Medico of Rome, the Director of the “Complex Systems & Security Lab” of the University and furthermore the delegate of the rector of the University for the relationships with the business world.

Since 2008 he is the Scientific Director of the Second Level Master in “Homeland Security” (now in its XII edition).

Since 2019 he works as an expert at the Prime Minister’s Office for the Management of Critical Infrastructures.

Since 2018 he is the General Manager of the National Consortium for Logistics and Transport (NITEL) where he also covered the role as Member of the Board of Directors from 2012 to 2018.

Currently he works as the coordinator of STW, the security of transport workers, funded by INAIL; he also worked as Scientific Coordinator of 4 International Research Projects and as Head of a Research Unit with more than 20 national and international research projects.

He was editor and assessor for the European Commission as part/under the FP7 and H2020 programmes. He acted as editor for research projects financed by the Ministry of Education, University and Research (MIUR), of the Israel Science Foundation (ISF) and the Latvian Council of Science (LCS).

He is the author of 9 books published in English and authored over 250 scientific papers published on scientific journals or presented on international conferences.

He is an Associated Editor of the *International Journal of Critical Infrastructures Protection* published by Elsevier.

CURRENT POSITION

Full Professor of Automatic Control at the department of Engineering at the University CAMPUS Bio -Medico of Rome (starting from 01/11/2019).

Director of the Second Level Master in “Homeland Security” established at the University CAMPUS Bio -Medico of Rome (since 2008).

POSITIONS PREVIOUSLY HELD

2010 - 2019 Associate Professor of Automatic Control at the department of Engineering at the University CAMPUS Bio -Medico of Rome

2004 – 2010 Assistant Professor of Automatic Control at the department of Engineering at the University CAMPUS Bio -Medico of Rome

1999 - 2004 Official of the Presidency of the Council of Ministers – Chief of the section “Interdisciplinary projects” of the Computer Science and Telecommunication Office

EDUCATION

Nov 1996 *Ph.D.* in Electronic and Computer Engineering, VIII cycle, University of Naples “Federico II” (degree in Automation and Systems)

Apr 1993 Qualification to exercise the profession of engineer

Jul 1992 *Bachelor's Degree* in Electronic Engineering, with honours, at the University of Naples "Federico II" final score 110/110 with honours

AWARDS AND HONOURS

- 2010** Honoured with the title of *Ufficiale* dell'Ordine "Al Merito della Repubblica Italiana" (Officer of Order of the Italian Republic) by Presidential Decree of 23 December 2010.
- 2004** Honoured with the title of *Cavaliere* dell'Ordine "Al Merito della Repubblica Italiana" (Chevalier of Order of the Italian Republic) by Presidential Decree of 27 December 2004

ISTITUTIONAL POSITIONS

Present positions

- Apr 2019** Expert at the Prime Minister's Office for the identification of Critical Infrastructures (DPCM 23/04/2019)
- Sept 2019** Member of the Unit for Digital Transformation established at National School of Administration (SNA)
- Jun 2019** Scientific Director of the working group of Confindustria Digitale to define a Common Security Framework (CSF) in the healthcare sector
- Jan 2019** Member as Expert of the thematic group JRC – ERNCIP of the European Commission on 'Early Warning Zones for Critical Infrastructure Protection: use of biometric and video technologies'
- Sept 2018** General Manager of the National Consortium for Logistics and Transport (NITEL)
- Sept 2015** Director of a node of the National Laboratory of Cyber Security of CINI
- Jun 2014** Delegate of the rector for the relationships between the University and the business world (University Campus Bio-Medico of Roma)

Previous positions (principale)

- Apr 2014 – Nov 2017** President of the Academic Course in Industrial Engineering at the University Campus Bio-Medico of Rome
- Sept 2012 – Aug 2018** Member of the Board of Directors of the National Consortium for Logistics and Transport (NITEL)
- Feb 2003 – May 2005** Supervisor of the technic secretary of the Workgroup about the Critical Information Infrastructure Protection (CIIP) established at the President of the Council of Ministers – Innovation and Technology Department
- Mar 2003 – May 2005** Member, upon nomination of the Italian Government, of the senior expert group of the G8 on *Critical Information Infrastructure Protection*.
- Mar 2003 – Mar 2004** Member, upon nomination of the Italian Government of the *G8 High Tech Crime Subgroup*.
- Jan 2004 – Dec 2008** Point of Contact for the Italian Government of the *International CIIP Directory* created on behalf of the G8 of the British Government (through the Centre for the Protection of National Infrastructure - CPNI).

RESEARCH ACTIVITIES

Roberto Setola performed research on different aspects related to the modelling, control and supervision of infrastructures and complex systems. Part of that activity was performed under research projects financed by the European Commission or other national and international entities.

Currently he works as:

- Principal Investigator of the project **STW** “Security of transport workers” (BRIC INAIL) [2020 - 2022]
- Head of the WP and Research Unit of the project **RAFAEL** “System for Risk Analysis and Forecast for Critical Infrastructure in the Apennines dorsal Region”, (PON MIUR) [2019 - 2021]
- Head of the WP and Research Unit of the project **HERMES** “Healthcare Emergency Support System for the Distributed response of Monitoring of Epidemics in the Society” (ESA) [2020 - 2022]

His work as **Principal Investigator** in the following European projects:

- **RISING** “indoor localization and building maintenance using radio frequency Identification and inertial Navigation” (SAFERA Programme) [2015 - 2016]
- **SLO** “Security Liaison Officer” (HOME/2012/CIPS/AG/4000003747) [2013 - 2014]
- **FACIES** “online identification of Failure and Attack on interdependent Critical Infrastructures” (HOME/2011/CIPS/AG/4000002115) [2012 – 2014]
- **SECUFOOD** “Security of European food supply chain” (JLS/2008/CIPS/022) [2009 – 2010]

He worked as scientific director of a research unit within over 20 projects financed by the European Commission and other national entities of which the most important are:

- **SmartBench** – developing a smart platform for integrated security in industrial plants (INAIL/BRIC) [2017-2019]
- **SecurWater** (collaboration Italy-Israel) [2017-2018]
- **CIPRNET** Critical Infrastructure Preparedness and Resilience Research Network (FP7) [2013-2017]
- **STRUCTURES** Strategies for the Improvement of Critical Infrastructure Resilience to Electromagnetic Attacks (FP7) [2012-2015]
- **SPARC** Space and Ground Critical Infrastructures (HOME/2011/CIPS/AG/4000002119U) [2012-2013]
- **THREVI2** Threat-vulnerability path Identification for critical Infrastructures (HOME/2011/CIPS/AG/4000002102) [2012-2013]
- **REFIRE** Rescue Localization Systems (HOME/2010/CIPS/AG/033) [2012-2013]
- **METRIP** Methodological Tool for Railway Infrastructure Protection (HOME/2010/CIPS/AG/035) [2012-2013]

Furthermore, he was the person in charge for:

- ✓ Planning of a Security System for the building site of the TAP (Trans – Adriatic Pipeline) [2018-pres.]
- ✓ Study commissioned from TELT for «*étude de sécurité des sites de chantiers et futures zones de chantier en territoires italien et français*» with reference to the evaluation of security risks and the identification of possible countermeasures with regard to the building sites for the Torino-Lione both on the Italian and French territory [2016-2017].
- ✓ Study on Security Awareness in Gas Infrastructure” commissioned from Gas Infrastructure Europe (GIE) [2014-2015]

TEACHING ACTIVITY

Roberto Setola performed teaching activities since 1995, assuming the ownership of university courses and higher education. Currently, He is responsible of the following courses:

- *Automatic Control*– University Campus Bio-Medico of Roma (9 CFU)
- *Cyber Security for Operational Technologies* - University Campus Bio-Medico of Roma (6 CFU)
- *Automazione e Sicurezza sui luoghi di lavoro* - University Campus Bio-Medico of Roma (6 CFU)
- *Dynamics and Control of Chemical Process* - University Campus Bio-Medico of Roma (3 CFU) – taught in English
- *Tecnologie Alimentari* - University Campus Bio-Medico of Roma (2 CFU)
- *System Engineering for Digital Transformation* – National School of Administration (SNA)
- *Cyber Security of Critical Infrastructures* - Scuola Superiore di Specializzazione in Telecomunicazioni Istituto Superiore C.T.I. (ex ISCOM) Postgraduate University in Telecommunications Higher Institute (ex ISCOM)
- *Enterprise Risk Management / Rischi Emergenti* – LUISS

He is the *Director* of the Second Level Master in “*Homeland Security*” established at the Faculty of Engineering at the University CAMPUS Bio -Medico of Rome (since 2008).

REVIEWER AND EVALUATOR

- Auditor for the Ministry of Research and University for the calls PRIN, FIRB, 593, ERA NET
- Evaluator on behalf of the European Commission for research project proposals in the field of VII FP for the issues ICT and Security in the field of the ERC programme.
- He worked as an auditor on behalf of the European Commission on the project IST-FP7 VIKING (Vital Infrastructure, Networks, Information and Control Systems Management).
- He worked as an auditor on research project proposals on behalf of the *Israel Science Foundation (ISF)* [2018]
- He worked as an auditor on research project proposals on behalf of the *Latvian Council of Science (LCS)* – [2018, 2019]
- He was a member of the commission of public competitions within the university sector and public administration

OTHER ACTIVITIES

- He is an Associated Editor of the *International Journal of Critical Infrastructures Protection (IJCIP)* published by Elsevier (IF 2,164).
- He is a member of the editorial board of the international journal *Journal of Integrated Security and Safety Science (JISSS)*.
- He is a member of the editorial board of the international journal *International Journal of System of Systems Engineering (JSSE)*.
- He worked as co-leader organising 3 international conferences, *Program Committee member* of tens of national conferences.
- He is a *Senior Member of IEEE* since 2007.
- He is member of the Associazione Italiana Professionisti Security Aziendale (AIPSA) (Professional Italian Association of Security Experts).
- He was a founding member, member of the board of directors and secretary of the **AIIC** (Associazione Italiana esperti Infrastrutture Critiche) (Professional Italian Association of Critical Infrastructure Experts);
- He was a founding member of the *Working Group 11.10* of the IFIP on *Critical Infrastructure Protection*

SCIENTIFIC PUBLICATIONS

Roberto Setola is the author of more than 250 scientific publications 9 books

Books (partial list)

- ✓ Setola, R., Rosato, V., Kyriakides, E., & Rome, E. (Eds.). (2017). *Managing the Complexity of Critical Infrastructures: A Modelling and Simulation Approach* (Vol. 90). Springer.
- ✓ C. Pragliola, A. Sforza, R. Setola, and V. Vittorini, “*Railway Security*”, Springer-Verlag, Berlin, 2015
- ✓ F. Flammini, R. Setola and G. Franceschetti, (Eds.), *Effective Surveillance for Homeland Security: Balancing Technology and Social Issues*, CRC Press, 2013
- ✓ J. Lopez-Munoz, R. Setola and S.D. Wolthusen, (Eds.), *Advances in Critical Infrastructure Protection: Information Infrastructure Models, Analysis, and Defense*, Springer-Verlag, Berlin, 2012
- ✓ R. Setola, S. Geretshuber, (Eds.), *Critical Information Infrastructure Security*, Lecture Notes in Computer Science, Security and Cryptology, Springer-Verlag, Berlin, Vol. 5508, ISBN: 978-3-642-03551-7, 2009
- ✓ Cacace, F., Farina, L., Setola, R., & Germani, A. (Eds.). (2017). *Positive Systems: Theory and Applications* (POSTA 2016) Rome, Italy, September 14-16, 2016 (Vol. 471). Springer.
- ✓ Havarneanu, G., Setola, R., Nassopoulos, H., & Wolthusen, S. (Eds.). (2017). *Critical Information Infrastructures Security: 11th International Conference, CRITIS 2016, Paris, France, October 10–12, 2016, Revised Selected Papers* (Vol. 10242). Springer.
- ✓ Cavallo, R. Setola, F. Vasca, *Using MATLAB, SIMULINK and Control System Toolbox. A Practical Approach*, Prentice Hall, Campus 400, England, 1996.

Scientific Papers (last publications)

- Assenza, G., Faramondi, L., Oliva, G., & Setola, R. (2020). Cyber threats for operational technologies. *International Journal of System of Systems Engineering*, 10(2), 128-142.
- Faramondi, L., Oliva, G., & Setola, R. (2020). Multi-criteria node criticality assessment framework for critical infrastructure networks. *International Journal of Critical Infrastructure Protection*, 28, 100338.
- Gnoni, M. G., Bragatto, P. A., Milazzo, M. F., & Setola, R. (2020). Integrating IoT technologies for an “intelligent” safety management in the process industry. *Procedia Manufacturing*, 42, 511-515.
- Carassiti, M., Cataldo, R., Formica, D., Massaroni, C., De Filippis, A., Palermo, P., ... & Schena, E. (2020). A new pressure guided management tool for epidural space detection: feasibility assessment in a clinical scenario. *Minerva Anestesiologica*.

- Assenza, G., Chittaro, A., De Maggio, M. C., Mastrapasqua, M., & Setola, R. (2020). A Review of Methods for Evaluating Security Awareness Initiatives. *European Journal for Security Research*, 5(2), 259-287.
- Oliva, G., Scala, A., Setola, R., & Dell'Olmo, P. (2019). Opinion-based optimal group formation. *Omega*, 89, 164-176.
- Setola, R., Faramondi, L., Salzano, E., & Cozzani, V. (2019). An overview of Cyber Attack to Industrial Control System. *Chemical Engineering Transactions*, 77, 907-912.
- Tugnoli, A., Iaiani, M., Oliva, G., Salzano, E., Setola, R., & Cozzani, V. (2019). Physical security barriers and protection distances for Seveso sites. *Chemical Engineering Transactions*, 77, 883-888.
- Lyovin, B. A., Shvetsov, A. V., Setola, R., Shvetsova, S. V., & Tesei, M. (2019). Method for remote rapid response to transportation security threats on high speed rail systems. *International Journal of Critical Infrastructures*, 15(4), 324-335.
- Oliva, G., Panzieri, S., Setola, R., & Gasparri, A. (2019). Gossip algorithm for multi-agent systems via random walk. *Systems & Control Letters*, 128, 34-40.
- Alcaraz, C., Bernieri, G., Pascucci, F., Lopez, J., & Setola, R. (2019). Covert Channels-Based Stealth Attacks in Industry 4.0. *IEEE Systems Journal*.
- Oliva, G., Setola, R., Scala, A., & Dell'Olmo, P. (2019). Sparse analytic hierarchy process: an experimental analysis. *Soft Computing*, 23(9), 2887-2898.
- Faramondi, L., Oliva, G., Setola, R., & Hadjicostis, C. N. (2019). Distributed C-Means Clustering via Broadcast-Only Token-Passing. *IEEE Transactions on Control of Network Systems*.
- De Maggio, M. C., Mastrapasqua, M., Tesei, M., Chittaro, A., & Setola, R. (2019). How to Improve the Security Awareness in Complex Organizations. *European Journal for Security Research*, 4(1), 33-49.
- Faramondi, L., Setola, R., Panzieri, S., Pascucci, F., & Oliva, G. (2018). Finding critical nodes in infrastructure networks. *International Journal of Critical Infrastructure Protection*, 20, 3-15.
- Oliva, G., Setola, R., Glielmo, L., & Hadjicostis, C. N. (2018). Distributed cycle detection and removal. *IEEE Transactions on Control of Network Systems*, 5(1), 194-204.