STEFANO IANNUCCI

stefano.iannucci@uniroma3.it
https://www.linkedin.com/in/stefano-iannucci/
Citizenship: Italian
Spoken Languages: Italian, English

EDUCATION

Bachelor of Engineering | *Computer Engineering* — 2007
University of Rome "Tor Vergata" — Rome, Italy

Master of Engineering | *Computer Engineering* — 2009
University of Rome "Tor Vergata" — Rome, Italy

Doctoral Degree | *Computer Science and Automation Engineering* — 2015
University of Rome "Tor Vergata" — Rome, Italy

ACADEMIC APPOINTMENTS

Postdoctoral Associate — September 2015 - August 2016
High Performance Computing Collaboratory, Mississippi State University — Starkville, MS, USA

Assistant Research Professor — August 2016 - August 2017
High Performance Computing Collaboratory, Mississippi State University — Starkville, MS, USA

Assistant Professor — August 2017 - January 2022
Computer Science and Engineering, Mississippi State University — Starkville, MS, USA

Adjunct Professor — January 2022 - Present
Computer Science and Engineering, Mississippi State University — Starkville, MS, USA

Assistant Professor (RTD-B) — March 2022 - Present
Department of Engineering, Roma Tre University — Rome, Italy

OTHER APPOINTMENTS

Founder and CEO — 2010 - 2013
chmod srl — Colleferro (RM), Italy

Co-Founder and CTO — 2012 - 2015
grep srl — Rome, Italy

Co-Founder — 2023 - present
AIOTI llc — Richmond, VA, USA

AWARDS AND HONORS

Best paper award — 2011
IEEE 6th International Symposium on Service Oriented Systems (SOSE) — Irvine, CA, USA

Italian National Scientific Qualification (ASN 2018) for the role of Associate Professor in Computer Science (01/B1) — 2020
Italian Ministry of Education, University and Research (MIUR) — Italy

Italian National Scientific Qualification (ASN 2018) for the role of Associate Professor in Computer Engineering (09/H1) — 2021
Italian Ministry of Education, University and Research (MIUR)) — Italy

Courses taught (as course responsible)

Information and Computer Security — Fall 2017, Fall 2018, Fall 2019
Mississippi State University — Starkville, MS

Special Topics on Autonomic Cyber-Security — Spring 2018, Fall 2020
Mississippi State University — Starkville, MS

Secure Software Engineering — Spring 2019
Mississippi State University — Starkville, MS

Special Topics on Web Applications Penetration Testing — Fall 2019
Mississippi State University — Starkville, MS

Operating Systems I — Spring 2020, Fall 2020, Winter 2020, Spring 2021, Summer 2021, Fall 2021
Mississippi State University — Starkville, MS

Reinforcement Learning and its Applications to Intrusion Response — Spring 2022
Roma Tre University (Doctoral Course) — Rome, Italy

Fundamentals of Computer Programming and Data Analytics — Fall 2023
Roma Tre University — Rome, Italy

Fundamentals of Computer Science — Fall 2023
Roma Tre University - shared teaching with Giordano Da Lozzo — Rome, Italy

Technologies and Architectures for Data Management — Spring 2023
Roma Tre University - shared teaching with Paolo Atzeni and Luigi Bellomarini — Rome, Italy

Operating Systems - Master in Information and Communications Technologies — Fall 2023
Roma Tre University — Rome, Italy

Operating Systems — Fall 2023
Roma Tre University — Rome, Italy

Fundamentals of Computer Science — Fall 2023
Roma Tre University - shared teaching with Prof. Giordano Da Lozzo — Rome, Italy

Technologies and Architectures for Data Management — Spring 2024
Roma Tre University - shared teaching with Prof. Paolo Atzeni and Prof. Luigi Bellomarini — Rome, Italy

Invited Speeches

**"The biggest Cybersecurity Threats in America –
Scams and How to Protect You and Your Family"** — December 2017
Invited Seminar, Kiwanis Association of Tupelo — Tupelo, MS

"Model-Based Intrusion Response for Enterprise Systems" — March 2018
Invited Seminar, University of Rome "Tor Vergata" — Rome, IT

"Autonomic Security for Distributed Systems" — May 2018
Invited Seminar, Blekinge Institute of Technology (BTH) — Karlskrona, SE

"Towards Autonomic Security Management" — November 2018
Invited as distinguished speaker, NIST Cybersecurity Risk Management Conference — Baltimore, MD, USA

"Model-Based Autonomic Security Management for Distributed Systems" — July 2019
Invited Seminar, Sapienza University of Rome — Rome, IT

"A Hybrid Model-Free Approach to Autonomic Security Management" — January 2020
Invited Seminar, University of Florida — Gainesville, FL, USA

"A Hybrid Model-Free Approach to Autonomic Security Management" — April 2020
Keynote Speaker, IEEE International Conference on Intelligent Engineering and Management — London, UK

Conference Presentations

"Designing a broker for QoS-driven runtime adaptation of SOA applications" July 2010
IEEE International Conference on Web Services (ICWS) 2010 Miami, FL, USA

"Improving SOA Applications Response Time with Service Overload Detection" June 2012
ACM International Symposium on High-Performance Parallel and Distributed Computing (HPDC) 2012 Delft, NL

"Designing a flexible and modular architecture for a private cloud: a case study" June 2012
ACM International Symposium on High-Performance Parallel and Distributed Computing (HPDC) 2012 Delft, NL

"Cloud Desktop Workload: a Characterization Study" March 2015
IEEE International Conference on Cloud Engineering (IC2E) 2015 Tempe, AZ, USA

"High-Performance Intrusion Response Planning on Many-Core Architectures" August 2016
IEEE International Conference on Computer Communication and Networks (ICCCN) 2016 Waikoloa, HI, USA

"A Comparison of Graph-Based Synthetic Data Generators for Benchmarking Next-Generation Intrusion Detection Systems" September 2017
IEEE Cluster Conference 2017 Honolulu, HI, USA

"Towards Self-Defense of Non-Stationary Systems" February 2019
IEEE International Conference on Computing, Networking and Communications (ICNC) 2019 Honolulu, HI, USA

"A Model-Integrated Approach to Designing Self-Protecting Systems" May 2019
IEEE International Conference on Software Engineering (ICSE) 2019 Montreal, CA

Ph.D. Students

Kazizakia Sultana 2017 - 2018
Mississippi State University Starkville, MS, USA
- Role: co-advisor, Ph.D. in Computer Science.

Patrick Day 2018 - present
Mississippi State University Starkville, MS, USA
- Role: co-advisor, Ph.D. in Computational Engineering.

Paul Danko 2019 - 2022
Mississippi State University Starkville, MS, USA
- Role: co-advisor, Ph.D. in Computer Science.

Jesse Ables 2020 - 2022
Mississippi State University Starkville, MS, USA
- Role: co-advisor, Ph.D. in Computer Science.

Shannon Birchell 2020 - 2022
Mississippi State University Starkville, MS, USA
- Role: advisor, Ph.D. in Computational Engineering.

Damodar Panigrahi 2021 - 2022
Mississippi State University Starkville, MS, USA
- Role: co-advisor, Ph.D. in Computer Science.

Master's Students

University of Rome Tor Vergata 2009 - 2015
Co-advisor, 9 Master's thesis Rome, Italy

Mississippi State University 2017 - 2021
Advisor, 12 Master's thesis Starkville, MS, USA

Roma Tre University 2022 - 2024
Advisor, 9 Master's thesis Rome, Italy

Bachelor's Students

University of Rome Tor Vergata
Co-advisor, 1 Bachelor's thesis

2009 - 2015
Rome, Italy

Roma Tre University
Advisor, 11 Bachelor's thesis

2022 - 2024
Rome, Italy

FUNDING INFORMATION [GRANTS AS PRINCIPAL INVESTIGATOR (PI) OR CO-PRINCIPAL INVESTIGATOR (CO-PI)]

PI: Research and innovation project for the design, implementation and exploitation of a Mobile Desktop-as-a-Service
2012-2015

Sponsor: POR FESR Lazio 2007/2013 FILAS SO 2011-1046 "Sostegno Agli Spin-Off Di Ricerca" -
FILAS (Financing, innovation and research in Lazio, Italy)

EUR 98,000

PI: Application-specific Benchmarking for Big Data Analytics
2016-2017

Sponsor: Pacific Northwest National Laboratory (PNNL) High Performance Data Analytics

$500,000

Co-PI: Dynamic Defense Strategy Planning for Research and Development and Infrastructure Networks
2017-2020

Sponsor: US Army Corps of Engineers, Engineer Research and Development Center

$1,312,315

PI: Autonomic Security for Next Generation Health Care Systems
2018

Sponsor: MSU Global Discovery Seed Grant Program

$15,000

PI: Intrusion Response Systems Evaluation
2020-2021

Sponsor: Google Cloud Platform Research Credits

$5,000

Co-PI: Enhanced Network Cybersecurity Research
2021-2024

Sponsor: US Army Corps of Engineers, Engineer Research and Development Center

$2,690,225

PI: Intrusion Detection Systems Evaluation
2021-2022

Sponsor: Google Cloud Platform Research Credits

$5,000

Co-PI: Development of a model-based Home Automation System
2022-2023

Sponsor: The Central Virginia Node of the Commonwealth Cyber Initiative

$20,000

PI: Panacea: A Model-Based Framework for Self-Protecting Systems
2023-2025

Sponsor: The Italian Ministry for Universities and Research
Program: Projects of Relevant National Interest (PRIN* 2022)

EUR 238,203

*PRIN, which stands for *Research Projects of relevant National Interest*, is among the most prestigious competitive Italian national research grants.

PARTICIPATION AND DIRECTION OF RESEARCH GROUPS

Application-specific Benchmarking for Big Data Analytics.
Project Participants:

08/2016 - 05/2017
Mississippi State University

- **Dr. Stefano Iannucci, Assistant Research Professor, Project Lead**
- Dr. Arindam Khaled, full-time postdoc
- Dr. Hisham Kholidy, part-time postdoc
- Dr. Rui Jia, part-time research assistant
- Dr. Ioana Banicescu, Professor
- Mr. Stefano Cordio, full-time research engineer
- Ms. Amrita Ghimre, Ph.D. student
- Mr. Justin Lewis, undergraduate student
- Mr. Spencer Callicott, undergraduate student

Dynamic Defense Strategy Planning for Research and Development and Infrastructure Networks.
Project Participants:

08/2017 - 04/2020
Mississippi State University

- **Dr. Stefano Iannucci, Assistant Professor, Project Lead**
- Mr. Andrea Montemaggio, full-time research engineer
- Ms. Melissa Hannis, full-time research engineer
- Mr. Russell Girault, part-time research engineer
- Mr. Justin Lewis, undergraduate student
- Mr. Spencer Callicott, undergraduate student

Enhanced Network Cybersecurity Research 10/2021 - 02/2022
Project Participants: Mississippi State University
- **Dr. Stefano Iannucci, Assistant Professor, Project Lead**
- Dr. Shahram Rahimi, Professor and Department Head
- Dr. Ioana Banicescu, Professor
- Mr. William Anderson, Graduate Student
- Mr. Jesse Ables, Graduate Student
- Mr. Bhuvanesh Abburi, Graduate Student
- Post-doc to be identified

For a Just Justice: Innovation and Efficiency in Judiciary Offices 06/2022 - 09/2023
Project Participants: Roma Tre University
- **Dr. Stefano Iannucci, Assistant Professor, Project Lead**
- Dr. Luca Cabibbo, Professor
- Dr. Paolo Merialdo, Professor
- Dr. Riccardo Torlone, Professor
- Dr. Gabriele Russo Russo, Research Assistant
- Mr. Luca Gregori, Research Assistant
- Mr. Andrea De Sanctis, Research Assistant

PRIN: Panacea: A Model-Based Framework for Self-Protecting Systems 10/2023 - 09/2025
Project Participants: Roma Tre University
- **Dr. Stefano Iannucci, Assistant Professor, Project Lead**
- Dr. Francesco Guerra, Professor
- Dr. Emiliano Casalicchio, Professor
- Dr. Claudio Di Ciccio, Professor
- Dr. Valter Crescenzi, Professor
- Dr. Donato Tiano, Research Asssistant

Furthermore, during my Ph.D. studies, I participated in the activities of the *"Distributed And MObile systems eNgineering (DAMON)* research group at the University of Rome "Tor Vergata". The DAMON group conducts research in the area of distributed systems, networks, mobile systems, cloud computing with an emphasis on analysis and optimization of the quality of service for adaptive and autonomic systems. The DAMON group collaborates/collaborated with national and international research groups: Politecnico di Milano, Università di Bologna, Università di Modena e Reggio Emilia, Sapienza University of Rome, Consiglio Nazionale delle Ricerche, ENEA, IBM T.J. Watson Research Center (USA), AT&T Labs, Univerisy of Massachussets at Amherst (USA), George Mason University (USA), Blekinge Institute of Technology (SE). With the research group, I carried out research on:

- Quality of Service aware scheduling in grid systems;
- Optimal run-time composition and adaptation of web services in Service Oriented Architectures;
- Optimal Quality of Service aware adaptation of Cloud systems.

RESPONSIBILITY OF SCIENTIFIC RESEARCH ASSIGNED BY PRIVATE OR PUBLIC INSTITUTIONS

In the period 09/2015 – 08/2016 I was assigned, with a Postdoc contract at Mississippi State University, the responsibility of a research in collaboration with the Pacific Northwest National Laboratory (PNNL) for the design and realization of a novel Intrusion Response System for High Performance Computing clusters.

In 2012 I received a grant of EUR 98,000 for a proposal submitted to POR FESR Lazio 2007/2013 FILAS SO 2011 – 1046. The project regarded the creation of a start-up company focused on research, design and realization of a Desktop as a Service (DaaS) cloud provider. I was co-founder of this start-up, named *grep srl*, for which I worked full-time from 2012 to 2015. As a consequence, I have a gap in the publications in that time range. However, the start-up obtained excellent results, both in terms of research and development of the service, and in terms of commercial success. In 2015, I sold my share of grep srl to focus on research and I accepted a Postdoc position at MSU. Grep srl is still active and currently employing 5 people.

In 2022 I received a grant of $20,000 for a proposal submitted to the Central Virginia Node of the Commonwealth Cyber Initiative. Within this project, the AIOTI LLC company (of which I am a co-founder) was founded in 2022. The company has currently one provisional patent and two additional patents under preparation.

RESEARCH SERVICE

Editorial Service

Guest Editor 2018
Springer Cluster Computing

Member of the Editorial Board 2019 - present
Springer Cluster Computing

Guest Editor for the special issue on "Advances in Self-Protecting Systems" 2019 - 2021
Elsevier Future Generation Computer Systems

Member of the Review Board 2021 - present
IEEE Transactions on Parallel and Distributed Computing

**Guest Editor for the special issue on
"Artificial Intelligence for Adaptive and Autonomous Cloud/Edge Computing Systems"** 2024-2025
ACM Transactions on Autonomous and Adaptive Systems

Panel Service

Panelist 2018
National Science Foundation

Conference Organization

Program Chair 2017
IEEE 12th Workshop on Feedback Computing

Co-Chair 2017
International Workshop on Container-based Systems for Big Data, Distributed and Parallel computing co-located with IEEE ICCAC 2017

Workshops Chair 2017
IEEE International Conference on Cloud and Autonomic Computing (ICCAC)

Co-Chair 2017
International Workshop on Container-based systems for Big data, Distributed and Parallel computing (CBDP'2018), co-located with EuroPar 2018.

Co-Chair 2019
1st International Workshop on Self-Protecting Systems (SPS) co-located with IEEE ICAC 2019

Co-Chair 2020
2nd International Workshop on Self-Protecting Systems (SPS)
co-located with IEEE ACSOS 2020

Co-Chair 2021
3rd International Workshop on Self-Protecting Systems (SPS)
co-located with IEEE ACSOS 2021

Co-Chair 2022
4th International Workshop on Self-Protecting Systems (SPS)
co-located with IEEE ACSOS 2022

Workshops Chair 2023
14th ACM/SPEC International Conference on Performance Engineering

Co-Chair 2023
1st International Workshop on Artificial Intelligence for Autonomous computing Systems (AI4AS)
co-located with IEEE ACSOS 2023

Participation to Technical Program Committees

TPC Member 2016
IEEE International Conference on Cloud and Autonomic Computing (ICCAC)

TPC Member 2016
10th IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO)

TPC Member 2016
The sixth Workshop of the Italian group on Quantitative Methods in Informatics (InfQ)

TPC Member 2017
1st International Workshop on Autonomic Management of Large Scale Container-Based Systems (AMLCS)

TPC Member 2017
International Workshop on Autonomous Control for Performance and Reliability Trade-offs
in Internet of Services (ACPROSS)

TPC Member 2018
IEEE Annual Ubiquitous Computing, Electronics & Mobile Communication Conference (UEMCON)

TPC Member 2018, 2019
IEEE/ACS International Conference on Computer Systems and Applications (AICCSA)

TPC Member 2019
International Workshop on Automation of Cloud Configuration and Operations

TPC Member 2019
IEEE/ACM International Conference on Utility and Cloud Computing (UCC)

TPC Member 2019, 2020
The Sixth International Conference on Software Defined Systems

TPC Member 2020
IEEE International Conference on Fog Computing (ICFC)

TPC Member 2021
International Conference on Advanced Engineering, Technology and Applications (ICAETA)

TPC Member 2022
ACM International Conference on Distributed and Event-Based Systems (DEBS)

TPC Member 2023
3rd Workshop on Distributed Machine Learning for the Intelligent Computing Continuum (DML-ICC)

TPC Member 2023
International Workshop on Quality of Service-Aware Serverless Computing (QServ)

Teaching Service

Faculty Advisor for the Facebook University Program 2017/2018, 2018/2019
Facebook - Mississippi State University
Raised $70K for participation of 30 students in International Conferences, including:
Usenix Enigma, BlackHat, DefCon, Women in Cyber-Security, Facebook F8.

Faculty Advisor for the DevNet Student Association 2018/2019, 2019/2020
Mississippi State University

Faculty Advisor for the Department of Energy CyberForce Competition 2018/2019, 2019/2020
Mississippi State University

Faculty Advisor for the CINI CyberChallenge Italian Competition 2022/2023, 2023/2024
Roma Tre University

University Service

Graduate Studies Committee 2017/2018, 2018/2019, 2019/2020, 2020/2021
Computer Science and Engineering, Mississippi State University

Cyber-Security and Operations Ad-Hoc Committee 2017/2018, 2018/2019, 2019/2020, 2020/2021
Computer Science and Engineering, Mississippi State University

General Search Committee 2018/2019, 2020/2021
Computer Science and Engineering, Mississippi State University

Cyber-Security Search Committee 2019/2020
Computer Science and Engineering, Mississippi State University

Artificial Intelligence Search Committee 2019/2020
Computer Science and Engineering, Mississippi State University

Cyber-Security Analyst Search 2019/2020
National Strategic Planning & Analysis Research Center, Mississippi State University

Cyber-Security Studies Committee 2021/2022
Computer Science and Engineering, Mississippi State University

Undergraduate Studies Committee 2021/2022
Computer Science and Engineering, Mississippi State University

Master's Program Admission Committee 2022/2023, 2023/2024
Roma Tre University

Master's Study Plan Committee 2022/2023, 2023/2024
Roma Tre University

Doctoral Studies Committee 2022/2023, 2023/2024
Roma Tre University

Class Schedule Committee 2023/2024
Roma Tre University

New Teaching Initiatives Committee (lead) 2023/2024
Roma Tre University

Bachelor Degree Reform (lead) 2023/2024
Roma Tre University

Complete List of International Publications

The authors of the publications marked with * made an equal contribution to the paper, thus are listed in alphabetical order. Authors reported in italic are students.

Journal Articles

J9* V. Cardellini, E. Casalicchio, **S. Iannucci**, *M. Lucantonio*, S. Mittal, *D. Panigrahi*, *A. Silvi*, "irs-partition: An Intrusion Response System utilizing Deep Q-Networks and system partitions", Elsevier SoftwareX, June 2022. doi: https://doi.org/10.1016/j.softx.2022.101120
Q2 SJR Quartile

J8 **S. Iannucci**, E. Casalicchio, B. Williams, "Editorial for FGCS Special Issue: Advances in Self-Protecting Systems", Elsevier Future Generation Computer Systems, May 2021. doi: https://doi.org/10.1016/j.future.2021.05.005
Q1 SJR Quartile

J7 *P. Day*, **S. Iannucci**, I. Banicescu, "Autonomic Feature Selection Using Computational Intelligence", Elsevier Future Generation Computer Systems, April 2020. doi: https://doi.org/10.1016/j.future.2020.04.01
Q1 SJR Quartile

J6 **S. Iannucci**, V. Cardellini, *O. D. Barba*, I. Banicescu, "A hybrid model-free approach for the near-optimal intrusion response control of non-stationary systems", Elsevier Future Generation Computer Systems, April 2020. doi: https://doi.org/10.1016/j.future.2020.03.018
Q1 SJR Quartile

J5 E. Casalicchio, **S. Iannucci**, "The State-of-the-Art in Container Technologies: Application, Orchestration and Security", Concurrency and Computation: Practice and Experience, Wiley, 2020. doi: https://doi.org/10.1002/cpe.5668
Q3 SJR Quartile

J4 **S. Iannucci**, S. Abdelwahed, *A. Montemaggio*, *M. Hannis*, L. Leonard, J. King, J. Hamilton, "A Model-Integrated Approach to Designing Self-Protecting Systems", IEEE Transactions on Software Engineering (TSE), Vol. 46, Issue 12, pp.1380-1392, Dec. 2020 doi: https://doi.ieeecomputersociety.org/10.1109/TSE.2018.2880218
Q1 SJR Quartile

J3 **S. Iannucci**, S. Abdelwahed, "Model-Based Response Planning Strategies for Autonomic Intrusion Protection", ACM Transactions on Autonomous and Adaptive Systems (TAAS), Vol. 13, No. 1, May 2018. doi: https://doi.org/10.1145/3168446
Q2 SJR Quartile

J2* V. Cardellini, *V. Di Valerio*, V. Grassi, **S. Iannucci**, F. Lo Presti, "QoS driven per-request load-aware service selection in service oriented architectures", International Journal of Software and Informatics, Special Issue on Service Oriented Systems Engineering, Vol. 7, No. 2, pp. 195-220, 2013
No SJR Classification

J1* V. Cardellini, E. Casalicchio, V. Grassi, **S. Iannucci**, F. Lo Presti, R. Mirandola, "MOSES: a framework for QoS driven runtime adaptation of service-oriented systems", IEEE Transactions on Software Engineering, Vol. 38, No. 5, pp. 1138-1159, Sept./Oct. 2012. doi: http://dx.doi.org/10.1109/TSE.2011.68
Q1 SJR Quartile

Conference Papers

IC19 *P. Day*, **S. Iannucci**, I. Banicescu. "Generating Host-Based Data from Network Traces for Intrusion Detection". In Proc. of 2023 IEEE International Conference on Computers, Software, and Applications (COMPSAC 2023), Turin, Italy, June 2023.

IC18 G. Russo Russo, *A. Milani*, **S. Iannucci**, V. Cardellini. "Towards QoS-Aware Function Composition Scheduling in Apache OpenWhisk". In Proc. of 2022 IEEE Annual Conference on Pervasive Computing and Communications Workshops (PerCom), Virtual, March 2022.

IC17 **S. Iannucci**, E. Casalicchio, *M. Lucantonio*. "An Intrusion Response Approach for Elastic Applications Based on Reinforcement Learning". In Proc. of IEEE Symposium on Computational Intelligence in Cyber Security (CICS 2021), Virtual, December 2021

IC16 **S. Iannucci**, *J. Ables, W. Anderson, B. Abburi*, V. Cardellini, I. Banicescu. "A Performance-Oriented Comparison of Neural Network Approaches for Anomaly-based Intrusion Detection". In Proc. of IEEE Symposium on Computational Intelligence in Cyber Security (CICS 2021), Virtual, December 2021

IC15 *S. M. Imtiaz*, *M. Amin*, *Q. A. Do*, **S. Iannucci**, T. Bhowmik. "Predicting Vulnerability for Requirements". In Proc. of 2021 IEEE 22nd International Conference on Information Reuse and Integration for Data Science (IRI 2021), Virtual, August 2021

IC14 *A. Montemaggio*, **S. Iannucci**, T. Bhowmik, J. Hamilton. "Designing a Methodological Framework for the Empirical Evaluation of Self-Protecting Systems". In Proc. of 2020 IEEE 5th International Workshops on Foundations and Applications of Self* Systems (FAS*W), Washington, DC, USA, August 2020. doi: https://doi.org/10.1109/ACSOS-C51401.2020.00059

IC13 **S. Iannucci**, *O. D. Barba*, V. Cardellini, I. Banicescu. "A Performance Evaluation of Deep Reinforcement Learning for Model-Based Intrusion Response". In Proc. of 2019 IEEE 4th International Workshops on Foundations and Applications of Self* Systems (FAS*W), Umea, Sweden, July 2019. doi: 10.1109/FAS-W.2019.00047

IC12 **S. Iannucci**, *A. Montemaggio*, B. Williams. "Towards Self-Defense of Non-Stationary Systems". In Proc. of IEEE International Conference on Computing, Networking and Communications (ICNC 2019), Honolulu, HI, 2019. doi: https://doi.org/10.1109/ICCNC.2019.8685487

IC11 H.A. Kholidy, **S. Iannucci**, Q. Chen, S. Abdelwahed, J. Hamilton, S. Sengupta. "Attacks Detection in SCADA Systems Using an Improved Non-Nested Generalized Exemplars Algorithm". Proc. of IEEE 12th International Conference on Computer Engineering & Systems (ICCES 2017), Cairo, Egypt, December 2017. doi: https://doi.org/10.1109/ICCES.2017.8275377

IC10 **S. Iannucci**, H. Kholidy, *A. Ghimire*, *R. Jia*, S. Abdelwahed, I. Banicescu, "A Comparison of Graph-Based Synthetic Data Generators for Benchmarking Next-Generation Intrusion Detection Systems", Proc. of IEEE International Conference on Cluster Computing (CLUSTER) 2017, Honolulu, Hawaii, September 2017. doi: https://doi.org/10.1109/CLUSTER.2017.54

IC9 **S. Iannucci**, Q. Chen, S. Abdelwahed, "High-Performance Intrusion Response Planning on Many-Core Architectures", Proc. of IEEE 25th International Conference on Computer Communication and Networks (ICCCN), Waikoloa, Hawaii, August 2016. doi: https://doi.org/10.1109/ICCCN.2016.

IC8 **S. Iannucci**, S. Abdelwahed, "A Probabilistic Approach to Autonomic Security Management", Proc. of IEEE 13th International Conference on Autonomic Computing (ICAC 2016), Wurzburg, Germany, July 2016. doi: https://doi.org/10.1109/ICAC.2016.12

IC7 **S. Iannucci**, S. Abdelwahed, "Towards Autonomic Intrusion Response Systems" Proceedings of the IEEE 13th International Conference on Autonomic Computing, poster presentation, Wurzburg, Germany, July 2016

IC6* E. Casalicchio, **S. Iannucci**, *L. Silvestri*, "Cloud Desktop Workload: a Characterization Study", Proc. of IEEE 3rd International Conference on Cloud Engineering (IC2E), Tempe, AZ, March 2015. doi: http://dx.doi.org/10.1109/IC2E.2015.25

IC5* V. Cardellini, **S. Iannucci**, "Designing a flexible and modular architecture for a private cloud: a case study", Proc. of 6th International Workshop on Virtualization Technologies in Distributed Computing (VTDC 2012) (in conjunction with the 21st International ACM Symposium on High-Performance Parallel and Distributed Computing), Delft, The Netherlands, pp. 37-44, June 2012. doi: http://dx.doi.org/10.1145/2287056.

IC4* V. Cardellini, *V. Di Valerio*, V. Grassi, **S. Iannucci**, F. Lo Presti, "A new approach to QoS driven service selection in service oriented architectures", Proc. of IEEE 6th International Symposium on Service-Oriented System Engineering (IEEE SOSE 2011), Irvine, CA, pp. 102-113, Dec. 2011. doi: http://dx.doi.org/10.1109/SOSE.2011.6139098. **Best paper award**

IC3* V. Cardellini, *V. Di Valerio*, V. Grassi, **S. Iannucci**, F. Lo Presti, "A performance comparison of QoS-driven service selection approaches", Proc. of 4th European ServiceWave Conference (ServiceWave 2011), Poznam, Poland, Lecture Notes in Computer Science Vol. 6994, Springer, pp. 167–178, Oct. 2011. doi: http://dx.doi.org/10.1007/978-3-642-24755-2_16

IC2* *A. Bellucci*, V. Cardellini, *V. Di Valerio*, **S. Iannucci**, "A scalable and highly available brokering service for SLA-based composite services", Proc. of 8th International Conference on Service Oriented Computing (ICSOC 2010), San Francisco, CA, Lecture Notes in Computer Science Vol. 6470, Springer, pp. 527–541, Dec. 2010. doi: http://dx.doi.org/10.1007/978-3-642-17358-5_36

IC1* V. Cardellini, **S. Iannucci**, "Designing a broker for QoS driven runtime adaptation of SOA applications", Proc. of IEEE International Conference on Web Services (ICWS 2010), Applications and Industry Track, Miami, FL, pp. 504–511, July 2010. doi: http://dx.doi.org/10.1109/ICWS.2010.77

Book Chapters

BC3 **S. Iannucci**, S. Abdelwahed, V. Cardellini, "Model-Based Autonomic Intrusion Response Systems: Review and Case Study", Autonomic Computing: Concepts, Infrastructure, and Applications (Second Edition), CRC Press - *Under Review*

BC2* V. Cardellini, E. Casalicchio, V. Grassi, **S. Iannucci**, F. Lo Presti, R. Mirandola, "MOSES: a platform for experimenting QoS-driven self-adaptation policies for service oriented systems", Software Engineering for Self-Adaptive Systems: Assurances, Springer LNCS, 2018. doi: http://dx.doi.org/10.4230/DagRep.3.12.67

BC1* V. Cardellini, *V. Di Valerio*, **S. Iannucci**, F. Lo Presti, "Service-oriented systems for adaptive management of service composition", Adaptive Web Services for Modular and Reusable Software Development: Tactics and Solutions, G. Ortiz and X. Cubo (eds.), IGI Global, pp. 161–195, 2013. doi: http://dx.doi.org/10.4018/978-1-4666-2089-6.ch006

Books and Monographs

BM1 **S. Iannucci**, "MOSES: a QoS-driven Autonomic Framework for Service Oriented Systems", Universitalia, July 2015, ISBN: 978-88-6507-649-1, EAN: 9788865076491

Preprints

P1 V. Crescenzi, **S. Iannucci**, "Web Pages Clustering and Classification with Characteristic Xpath-Fixed Points", Available at SSRN 4403112