

# Fabio De Gaspari

---

<b>RESEARCH POSITIONS</b>	<i>Research Fellow - <b>Sapienza University of Rome</b></i>	June 2019 - Present
<b>EDUCATION</b>	<i>PhD Course in Computer Science</i> <ul style="list-style-type: none"><li>• Sapienza University, Rome.</li></ul>	Nov 2015 - Feb 2019
	<i>Master Degree in Computer Science</i> <ul style="list-style-type: none"><li>• University of Padova: 110/110 cum laude.</li><li>• International study experience at Vrije Universiteit, Amsterdam, Erasmus program.</li></ul>	Jan 2012 - Sept 2015
	<i>Bachelor Degree in Computer Science</i> <ul style="list-style-type: none"><li>• University of Padova: 106/110.</li></ul>	Sept 2008 - Dec 2011
	<i>High School Degree</i> <ul style="list-style-type: none"><li>• Final grade: 100/100.</li></ul>	Sept 2003 - Jul 2008
<b>INTERNATIONAL EXPERIENCES</b>	<i>Oxford, UK - <b>Oxford University</b></i> <ul style="list-style-type: none"><li>• Visiting Scholar at Oxford Systems Security Lab, doing research on Deep Neural Networks applied to cybersecurity.</li></ul>	Feb 2020 - Apr 2020
	<i>Issy-les-Moulineaux, France - Internship at <b>Cisco Systems</b></i> <ul style="list-style-type: none"><li>• Research on security in Information-Centric Networking.</li></ul>	Apr 2017 - Oct 2017
	<i>Fairfax, USA - <b>George Mason University</b></i> <ul style="list-style-type: none"><li>• Visiting Scholar at CSIS, doing research on active defence techniques.</li></ul>	Jul 2016 - Aug 2016
	<i>Singapore - Internship at <b>Inst. for Infocomm Research</b></i> <ul style="list-style-type: none"><li>• Design of the algorithm and the implementation of a system for stack trace clustering based on crash root cause.</li><li>• Design of the algorithm and the implementation of a system for the automated assessment of security vulnerabilities on binary files.</li></ul>	Mar 2015 - Aug 2015
	<i>Amsterdam - Erasmus at <b>Vrije Universiteit Amsterdam</b></i> <ul style="list-style-type: none"><li>• Collaboration with PhDs Cristiano Giuffrida and Dirk Vogt for the implementation of in memory checkpointing in the Minix 3 kernel.</li></ul>	Feb 2013 - Aug 2013
<b>TEACHING</b>	<i>Sapienza University of Rome - Master's degree in Cybersecurity</i> <ul style="list-style-type: none"><li>• Ethical Hacking: Web application and Unix hacking.</li></ul>	year 2020 - 2021
	<i>Sapienza University of Rome - Master's degree in Cybersecurity</i> <ul style="list-style-type: none"><li>• Ethical Hacking: Web application and Unix hacking.</li></ul>	year 2019 - 2020

- Advanced Scripting Laboratory: Python language and forensic analysis.

**LANGUAGE SKILLS**

*Italian:* Native language.  
*English:* Fluent.  
*French:* Intermediary.

**PROG. LANGUAGES**

*Advanced Knowledge:* C, C++, Java, Python.  
*Average Knowledge:* Scala, Javascript, Assembly, PHP.  
*Basic Knowledge:* Ada, ML.

**AWARDS**

*PhD Scholarship - Sapienza University of Rome 2015*  
*Classified at the 3rd place at the Clusit Thesis Award 2015.*

**FINANCING**

*Progetti per Avvio alla Ricerca - Sapienza University 2020.*  
*Progetti per Avvio alla Ricerca - Sapienza University 2018.*

**INVITED SEMINARS**

*Evading machine learning classifiers: methods and techniques - University of Padua (IT), Dec 2019*  
*Access Control for IoT in ICN - International Symposium on Future Internet: Security Issues and Opportunities, May 2018.*  
*Attacking the Control Plane in Software-Defined Networking - Stevens Institute of Technology (USA) Aug. 2016.*

**PATENTS**

*Fabio De Gaspari, Alberto Compagno, Luca Muscariello, Giovanna Carofiglio*  
*IaaS-aided access control for information centric networking with internet-of-things US Patent App. 15/928,265*

**PUBLICATIONS**

*Fabio De Gaspari, Dorjan Hitaj, Giulio Pagnotta, Lorenzo De Carli, Luigi Vincenzo Mancini.*  
*EnCoD: Distinguishing Compressed and Encrypted File Fragments.*  
*In: Proceedings of the 2020 Network and System Security Conference (NSS 2020).*

*Fabio De Gaspari, Dorjan Hitaj, Giulio Pagnotta, Lorenzo De Carli, and Luigi V. Mancini.*  
*The Naked Sun: Malicious Cooperation Between Benign-Looking Processes.*  
*In Proceedings of the 2020 International Conference on Applied Cryptography and Network Security (ACNS 2020).*

*Fabio De Gaspari, Sushil Jajodia, Luigi V. Mancini, Giulio Pagnotta*  
*Towards Intelligent Cyber Deception Systems*  
*Autonomous Cyber Deception, Springer, 2019*

*Giovanna Carofiglio, Alberto Compagno, Mauro Conti, Fabio De Gaspari, Luca Muscariello.*  
*IaaS-Aided Access Control for Information-Centric IoT.*  
*In Proceedings of the 43rd IEEE Conference on Local Computer Networks (LCN 2018).*  
*Chicago, USA, October 1-4, 2018.*

*Mauro Conti, Fabio De Gaspari, Luigi V. Mancini.*  
*A Novel Stealthy Attack to Gather SDN Configuration-Information.*  
*In IEEE Transactions on Emerging Topics in Computing (TETC).*  
*Accepted for publication, 2018, in press.*

*Mauro Conti, Fabio De Gaspari, Luigi V. Mancini.*

Know Your Enemy: Stealth Configuration-Information Gathering in SDN.

In Proceedings of the 12th International Conference on Green, Pervasive, and Cloud Computing (**GPC 2017**).

Cetara, Amalfi Coast, Italy, May 11-14, 2017.

*Moreno Ambrosin, Mauro Conti, Fabio De Gaspari, Radha Poovendran.*

LineSwitch: Tackling Control Plane Saturation Attacks in Software-Defined Networking.

In IEEE/ACM Transactions On Networking (**ToN**).

Vol. 25, no. 2, pp. 1206-1219, April 2017.

*Moreno Ambrosin, Mauro Conti, Fabio De Gaspari, Nishanth Devarajan.*

“Amplified Distributed Denial of Service Attack in Software Defined Networking.

In Proceedings of the 2016 IFIP New Technologies, Mobility and Security (**NTMS 2016**).

Larnaca, Cyprus, November 21-23, 2016.

*Fabio De Gaspari, Sushil Jajodia, Luigi V. Mancini, Agostino Panico.*

AHEAD: A New Architecture for Active Defense.

In Proceedings of the 2016 ACM Workshop on Automated Decision Making for Active Cyber Defense (**SafeConfig 2016**).

Vienna, Austria, October 24th, 2016.

*Mauro Conti, Fabio De Gaspari, and Luigi V. Mancini.*

Anonymity in an Electronic Society: A Survey. Springer International Publishing.

2016. pp. 283-312.

*Moreno Ambrosin, Mauro Conti, Fabio De Gaspari, Radha Poovendran.*

LineSwitch: Efficiently Managing Switch Flow in Software-Defined Networking while Effectively Tackling DoS Attacks.

In Proceedings of the 10th ACM Symposium on Information, Computer and Communications Security. (**ACM SIGSAC ASIACCS 2015**).

Singapore, Republic of Singapore, April 14-17, 2015.

*Moreno Ambrosin, Mauro Conti, Fabio De Gaspari, Claudio Enrico Palazzi.*

Smartphone and laptop frameworks for vehicular networking experimentation.

In Proceedings of the 2013 IEEE/IFIP Wireless Days Conference (**IEEE/IFIP WD 2013**).

Valencia, Spain, November 13-15, 2013.