Daniel Ricardo dos Santos

PERSONAL AND CONTACT Website: daniel-rs.github.io Phone: +39 388 634 0742
INFORMATION LinkedIn: linkedin.com/in/danielricardosantos Location: Trento, Italy

Areas of Computer and Information Security; Software Engineering and Formal Methods; Interest Machine Learning and Artificial Intelligence.

EDUCATION University of Trento (UNITN), Italy

PhD. in Computer Science Expected graduation:

Thesis: Automatic Security Analysis of Business Processes Dec, 2016

Federal University of Santa Catarina (UFSC), Brazil

MSc. in Computer Science 2013

Thesis: Dynamic Risk-based Access Control for Cloud Computing

BSc. in Computer Science 2011

Thesis: Identity Management and Privacy in Cloud Computing

WORK Fondazione Bruno Kessler - Trento, Italy
EXPERIENCE

Post-doctoral Researcher 09/2016 - Current
Early Stage Researcher 09/2013 - 08/2016

SAP Labs - Mougins, France

Early Stage Researcher 09/2013 - 08/2016

SecPlus - Florianópolis, Brazil

Information Security Consultant 10/2012 - 07/2013

AltoQi - Florianópolis, Brazil

C++ developer 10/2011 - 04/2012

Networks and Management

Laboratory, UFSC - Florianópolis, Brazil

Research Assistant 07/2010 - 07/2013

FURTHER SECENTIS Winter School - Security of Enterprise Information Systems (2016) EDUCATION

IEEE Italy Section School of Career Boosting (2015)

Marktoberdorf Summer School - Dependable Software Systems Engineering (2014)

Bolzano Startup Weekend (2013)

UFSC Mathematics Summer School (2011)

SKILLS

Programming languages: Python, C/C++, Java, PHP, JavaScript.

Technical expertise: Penetration testing, Web and mobile security, Network and server administration (Linux), Database management (SQL), Formal methods.

Soft skills: Quick learner with good communication (verbal and written). Capable of working independently and in teams. Efficient project manager.

Languages: Portuguese (Native), English (Fluent), Italian (Intermediate).

AWARDS AND SCHOLARSHIPS

Best Student Paper Award, 2015 (DBSec conference)

Scholarship for PhD. studies, 2013-2016 (Marie-Curie Actions, EU)

Scholarship for MSc. studies, 2012-2013 (CNPq, Brazil)

Scholarship for BSc. studies, 2010-2011 (CNPq, Brazil)

PATENTS

- 1. S.E. Ponta, L. Compagna, **D.R. dos Santos**, S. Ranise, "Secure and Compliant Execution of Processes", filed on 13/04/2016
- A. Sabetta, L. Compagna, S.E. Ponta, S. Dashevskyi, D.R. dos Santos, F. Massacci, "Multi-context Exploit Test Management", filed on 22/04/2015

PUBLICATIONS

- 1. **D.R. dos Santos**, R. Marinho, G.R. Schmitt, C.M. Westphall, C.B. Westphall. "A Framework and Risk Assessment Approaches for Risk-based Access Control in the Cloud" in Journal of Network and Computer Applications, 2016 (In Press)
- 2. **D.R.** dos Santos, S.E. Ponta, S. Ranise. "Modular Synthesis of Enforcement Mechanisms for the Workflow Satisfiability Problem: Scalability and Reusability" in Proceedings of the 21st ACM Symposium on Access Control Models and Technologies (SACMAT), 2016
- 3. L. Compagna, **D.R. dos Santos**, S.E. Ponta, S. Ranise. "Cerberus: Automated Synthesis of Enforcement Mechanisms for Security-sensitive Business Processes" in Proceedings of the 22nd International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS), 2016
- 4. **D.R.** dos Santos, S. Ranise, L. Compagna, S.E. Ponta. "Assisting the Deployment of Security-Sensitive Workflows by Finding Execution Scenarios" in Data and Applications Security and Privacy XXIX (DBSec), 2015
- 5. C. Bertolissi, **D.R. dos Santos**, S. Ranise. "Automated Synthesis of Runtime Monitors to Enforce Authorization Policies in Business Processes" in Proceedings of the 10th ACM Symposium on Information, Computer and Communications Security (ASIACCS), 2015
- 6. S. Dashevskyi, **D.R. dos Santos**, F. Massacci, A. Sabetta. "TESTREX: a Testbed for Repeatable Exploits" in Proceedings of the 7th Workshop on Cyber Security Experimentation and Test (CSET), 2014
- P.A.F. Vitti, **D.R. dos Santos**, C.B. Westphall, C.M. Westphall, K.M.M. Vieira. "Current Issues in Cloud Computing Security and Management" in Proceedings of the 8th International Conference on Emerging Security Information, Systems and Technologies (SECURWARE), 2014
- 8. **D.R.** dos Santos, C.M. Westphall, C.B. Westphall. "A dynamic risk-based access control architecture for cloud computing" in Proceedings of the IEEE/IFIP Network Operations and Management Symposium (NOMS), 2014

- 9. C.B. Westphall et al. "Operation, Management, Security and Sustainability for Cloud Computing" in Revista de Sistemas de Informação da FSMA, vol. 2014, no. 13, 2014
- E.A. Rigon, C.M. Westphall, D.R. dos Santos, C.B. Westphall. "A Cyclical Evaluation Model of Information Security Maturity" in Information Management and Computer Security, vol. 22, no. 3, 2014
- 11. P. Silva, C.B. Westphall, C.M. Westphall M. Mattos, **D.R. dos Santos**. "An Architecture for Risk Analysis in Cloud" in Proceedings of the 10th International Conference on Networking and Services (ICNS), 2014
- 12. **D.R.** dos Santos, T.J. Nascimento, C.M. Westphall, M.A.P Leandro, C.B. Westphall. "Privacy-preserving identity federations in the cloud: a proof of concept" in International Journal of Security and Networks, vol. 9, no. 1, 2014
- 13. **D.R.** dos Santos, C.M. Westphall, C.B. Westphall. "Risk-based Dynamic Access Control for a Highly Scalable Cloud Federation" in Proceedings of the 7th International Conference on Emerging Security Information, Systems and Technologies (SECURWARE), 2013
- R.F. de Souza, C.B. Westphall, D.R. dos Santos, C.M. Westphall. "Challenges of Operationalizing PACS on Cloud Over Wireless Networks" in Proceedings of the 9th International Conference on Wireless and Mobile Communications (ICWMC), 2013
- 15. R.F. de Souza, C.B. Westphall, **D.R. dos Santos**, C.M. Westphall. "A Review of PACS on Cloud for Archiving Secure Medical Images" in International Journal of Privacy and Health Information Management, vol. 1, no. 1, 2013
- R.B. Brinhosa, C.M. Westphall, C.B. Westphall, D.R. dos Santos, F. Grezele.
 "A Validation Model of Data Input for Web Services" in Proceedings of the 12th International Conference on Networks (ICN), 2013
- M.A.P. Leandro, T.J. Nascimento, D.R. dos Santos, C.M. Westphall, C.B. Westphall. "Multi-Tenancy Authorization System with Federated Identity for Cloud-Based Environments Using Shibboleth" in Proceedings of the 11th International Conference on Networks (ICN), 2012
- 18. **D.R.** dos Santos, C.M. Westphall, "Uma aplicação de privacidade no gerenciamento de identidades em nuvem com uApprove" in Anais do Simpósio Brasileiro em Segurança da Informação e de Sistemas Computacionais (SBSEG), 2011

SECURITY Advisories CVE-2013-2618: Network Weathermap 0.97a Cross Site Scripting

CVE-2013-2619: Aspen 0.8 Directory Traversal

TEACHING ASSISTANCE Applied Security (MSc.) - UNITN, Italy - 2014

Operating Systems (BSc.) - UFSC, Brazil - 2013

Computer Networks (BSc.) - UFSC, Brazil - 2013

SCIENTIFIC AND PROFESSIONAL ASSOCIATIONS Association for Computing Machinery (ACM)

Working Group on Data and Applications Security and Privacy (IFIP WG11.3)

European Joint Conferences on Theory and Practice of Software (ETAPS)

Online courses

Machine Learning (Andrew Ng, Stanford - 2015)

Computer Systems Security (Nickolai Zeldovich, MIT - 2014)

Introduction to Philosophy (Caspar Hare, MIT - 2014)