FLAVIO TOFFALINI

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CURRENT POSITION

École Polytechnique Fédérale de Lausanne (EPFL), Switzerland

PostDoc, supervised by Prof. Mathias Payer

Topic: fuzzing, software analysis

EDUCATION

Singapore University of Technology and Design, Singapore

Sep 2021

Ph.D., supervisor Prof. Jianying Zhou

Topic: trusted computing, system security

University of Verona, Italy

Oct 2015

M.S. in Computer Science and Engineering 108/110, GPA 3,9/4

Supervisor Prof. Damiano Carra

Master thesis topic: Google dorks, Web security

University of Pavia, Italy

Dec 2009

B.S. in Computer Engineer 101/110, GPA 3,67/4

Supervisor Prof. Paolo Gamba

ACADEMIC ACTIVITIES

King's College London Nov 2019 - Mar 2020

Visiting fellow, supervised by Prof. Lorenzo Cavallaro

London, UK

· Topic: trusted computing, system security

University of Padua Jan 2018 - Aug 2018

Visiting fellow, supervised by Prof. Mauro Conti

· Topic: trusted computing, system security

Singapore University of Technology and Design Aug 2016 - Dec 2017

Research Assistant, supervised by Prof. Martín Ochoa Singapore, Singapore

· Topic: insider threats, trusted computing

University of Verona Dec 2015 - July 2016

Research Assistant, supervised by Prof. Fausto Spoto Verona, Italy

· Topic: static analysis of Android applications

Eurecom April 2015 - July 2015

Visiting fellow, supervised by Prof. Davide Balzarotti Biot, France

· Topic: Google dorks, Web security

SELECT PUBLICATIONS

SnakeGX: a sneaky attack against SGX Enclaves

conference - 2021

Nov 2021

The 19th International Conference on Applied Cryptography and Network Security (ACNS)

· Toffalini F., Graziano M., Conti M., Zhou J.

ScaRR: Scalable Runtime Remote Attestation for Complex Systems conference - 2019 The 22nd International Symposium on Research in Attacks, Intrusions and Defenses (RAID)

· Toffalini F., Losiouk E., Biondo A., Zhou J., Conti M.

Insight Into Insiders and IT: A Survey of Insider Threat Taxonomies, Analysis, Modeling, and Countermeasures

journal - 2019

ACM Computing Surveys (CSUR)

· Homoliak I., Toffalini F., Guarnizo J., Elovici Y., Ochoa M.

Careful-Packing: A Practical and Scalable Anti-Tampering Software Protection enforced by Trusted Computing

conference - 2019

The 9th ACM Conference on Data and Application Security and Privacy (CODASPY)

· Toffalini F., Ochoa M., Sun J., and Zhou J.

Static Analysis of Context Leaks in Android Applications

conference - 2018

The 40th International Conference on Software Engineering: Software Engineering in Practice (SEPA@ICSE)

· Toffalini F., Sun J, and Ochoa M.

Detection of Masqueraders Based on Graph Partitioning of File System Access Events

workshop - 2018

IEEE Security and Privacy Workshops (SPW)

· Toffalini F., Homoliak I., Harilal A., Binder A., and Ochoa M.

TWOS: A Dataset of Malicious Insider Threat Behavior Based on a Gamified Competition

workshop - 2017

The 9th ACM CCS International Workshop on Managing Insider Security Threats (MIST)

· Harilal A., Toffalini F., Castellanos J., Guarnizo J., Homoliak I., and Ochoa M.

Google Dorks: Analysis, Creation, and new Defenses

conference - 2016

Detection of Intrusions and Malware, and Vulnerability Assessment The 13th International Conference, (DIMVA)

· Toffalini F., Abba' M., Carra D. and Balzarotti D.