Simone Aonzo

Curriculum Vitae (Updated to: 2019/08/08)



Education

2017-now Ph.D. student in Computer Science and Systems Engineering, University of

Genoa (Italy) (DIBRIS).

2010-2015 Master of Computer Science, University of Genoa (Italy), 110/110 cum laude.

Master Thesis

Title "A new permission handling in Android" [1]

Supervisor Prof. Giovanni Lagorio

Certifications

2019-03-05 GIAC Reverse Engineering Malware

Work Experience

2015-2017 Android pentester and developer, *Talos*, Genoa/Italy.

I have pentested several Android apps, especially banking ones, according to the Mobile Application Security Verification Standard (MASVS);

I developed the back end (based on a microservices architecture) of Approver, a commercial analysis service for Android apps.

analysis service for Amarola apps.

2007-2010 **Network and Computer Systems Administrators**, *Teknoos*, Savona/Italy. Upkeep and configuration of IT infrastructure for small/medium business companies.

Teaching Activity

2017-now Android Malware Analysis

2017-now Android Mobile Programming

2017-now Operating System

2017-now Mobile Security

for Talos in private companies

B.Sc. Computer Engineering

B.Sc. Computer Engineering

Master in Cybersecurity

Natural Languages

Italian Native speaker

English CEFR C1

Computer Languages

Programming C, Python, Java, C#, C++, PHP, Javascript Assembly ARM, $\times 86$

sorted by profiency

Technical Experience

- To support the experimental evidence of my publications I developed two Android apps ApkMuzzle [1] and Baddroids [2], both of them analyze the apps installed on your Android device: the former removes permissions and advertising, the latter uses an energy saver static analysis technique to extract features for a machine learning model in order to detect malicious apps.
- I teach (see "Teaching Activity") the state-of-the-art techniques and processes to analyze Android malware, starting from the basic concepts of the Android ecosystem.
- Capture-The-Flag player and co-founder of Zenhack team, my favorite categories are reversing and exploitation.

Research Topics by Keywords

- reverse engineering [1, 4]
- o program analysis [1, 2, 4]

o phishing [3]

o machine learning [2]

Publications

- [1] S. Aonzo, G. Lagorio, and A. Merlo, "Rmperm: A tool for android permissions removal.," in *SECRYPT*, pp. 319–326, 2017.
- [2] S. Aonzo, A. Merlo, M. Migliardi, L. Oneto, and F. Palmieri, "Low-resource foot-print, data-driven malware detection on android," *IEEE Transactions on Sustainable Computing*, 2017.
- [3] S. Aonzo, A. Merlo, G. Tavella, and Y. Fratantonio, "Phishing Attacks on Modern Android," in *Proceedings of the ACM Conference on Computer and Communications Security (CCS)*, (Toronto, Canada), October 2018.
- [4] D. Caputo, L. Verderame, S. Aonzo, and A. Merlo, "Droids in disarray: Detecting frame confusion in hybrid android apps," in *IFIP Annual Conference on Data and Applications Security and Privacy*, pp. 121–139, Springer, 2019.

References

Prof. Alessandro Armando

Research manager

Prof. Yanick Fratantonio

Prof. Giovanni Lagorio

Master thesis supervisor

Prof. Alessio Merlo

PhD advisor

Ph.D. Luca Verderame

Talos srls. CEO

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