Cristian Assaiante

Curriculum vitae

(last updated: October, 2023)

Personal Data

Nationality:	Italian
email:	assaiante@diag.uniroma1.it
Personal Page:	cristianassaiante.github.io

Employment

Nov. 2021 - present	PhD student, Engineering in Computer Science *Sapienza University of Rome, Italy* Advisor: Prof. Leonardo Querzoni
Jan. 2020 - present	Organizer and Training Coordinator, CyberChallenge.IT *Sapienza University of Rome, Italy*
Mar. 2021 - May 2021	Training Coordinator and Challenges Author, Olicyber.IT

Education

Sep. 2019 - Oct. 2021	M.Sc., Engineering in Computer Science (in English) *Sapienza University of Rome, Italy* Final grade: 110/110 with honors (*summa cum laude*) Thesis: A Study of the Completeness of Debug Symbols in Optimizing Compilers
Sep. 2016 - Jul. 2019	B.Sc., Computer and Control Engineering *Sapienza University of Rome, Italy* Final grade: 110/110 with honors (*summa cum laude*) Thesis: A Micro-Architectural Red Pill

Research Interests

My research interests spans over several aspects of software and system security with the main focus being software testing. So far, my works are about bug finding in compiler infrastructures and optimizations pressure over software debuggability. I am passionate about compilers optimizations, program analysis techniques applied to malware analysis, operating systems and micro-architectural attacks.

Teaching

2023 Adjunct Professor for *Sistemi di Calcolo* (3CFU module) course (Spring 2023), Sapienza University of Rome.

2022 Teaching Assistant for *Sistemi di Calcolo* course (Spring 2022), Sapienza University of Rome.

Service

Conferences and Workshops

2022 Shadow Program Committee member for EuroSys'23 - 18th European Conference on Computer Systems.

Artifact Evaluation Committee member for EuroSys'23 - 18th European Conference on Computer Systems.

Journals

2023 Reviewer for Computers & Security (COSE).

Reviewer for SoftwareX (SOFTX).

Publications

Conferences and Workshops

2023 **C. Assaiante**, D. C. D'Elia, G. A. Di Luna, L. Querzoni. *Where Did My Variable Go? Poking Holes in Incomplete Debug Information*. To appear in Proceedings of the 28th ACM International Conference on Architectural Support for Programming Languages and Operating Systems (**ASPLOS** '23). [CORE21 RANK: A*.]

Honors and Awards

2023 **winner** with mhackeroni, Hack-a-Sat 4 *CTF Finals*, Las Vegas, USA

2022 **winner**, BlackHat ASIA cybersecurity conference *Student Scholarship*, Singapore

2021 **winner**, 42ND IEEE Symposium on Security and Privacy conference *Student Travel Grant Award*, Online

awarded, M.Sc. in Engineering in Computer Science *Honors Program*, Rome, Italy

1st place with TheRomanXpl0it, CSAW '21 *Embedded Cybersecurity Challenge Finals*, Online

2020 **1st prize**, 15TH CLUSIT thesis prize to *A Micro-Architectural Red Pill*, Online

winner, BlackHat EU cybersecurity conference *Student Scholarship*, Online

1st place with TheRomanXpl0it, CSAW '20 *Embedded Cybersecurity Challenge Finals*, Online

2019 **5th place** with mhackeroni, DEFCON 27 *CTF Finals*, Las Vegas, USA

awarded, B.Sc. in Computer and Control Engineering *Honors Program*, Rome, Italy

1st place with TheRomanXpl0it, CSAW '19 *Embedded Cybersecurity Challenge Finals*, Valence, France

Fundings

2022 Ph.D. starting grant for the project: Practical Control-Flow Integrity for Software Security

Languages

English: Fluent
Italian: Native