# **CRISTIAN ASSAIANTE**

## Curriculum vitae

(last updated: January, 2024)

## **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, OLICYBERIT

# EDUCATION

Sep. 2019 - Oct. 2021	
	Sapienza University of Rome, Italy
	Final grade: 110/110 with honors ( <i>summa cum laude</i> )
	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 ( <i>summa cum laude</i> )
	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 microarchitectural 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**

Shadow Program Committee member for EuroSys'23 - 18<sup>th</sup> European Conference on Computer Systems.
 Artifact Evaluation Committee member for EuroSys'23 - 18<sup>th</sup> 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, 42<sup>ND</sup> IEEE SYMPOSIUM ON SECURITY AND PRIVACY conference Student Travel Grant Award, Online
  awarded, M.Sc. in Engineering in Computer Science Honors Program, Rome, Italy
  1<sup>st</sup> place with TheRomanXploit, CSAW '21 Embedded Cybersecurity Challenge Finals, Online
- 2020 1<sup>st</sup> prize, 15<sup>TH</sup> CLUSIT thesis prize to A Micro-Architectural Red Pill, Online winner, BLACKHAT EU cybersecurity conference Student Scholarship, Online
  1<sup>st</sup> place with TheRomanXploit, CSAW '20 Embedded Cybersecurity Challenge Finals, Online
- 2019 5<sup>th</sup> place with mhackeroni, DEFCON 27 CTF Finals, Las Vegas, USA awarded, B.Sc. in Computer and Control Engineering Honors Program, Rome, Italy 1<sup>st</sup> place with TheRomanXploit, 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 (Certified:	B2)
ITALIAN:	Native	