# CRISTIAN ASSAIANTE

# Curriculum vitae

(last updated: March, 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, OLICYBERIT

# **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.

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

# **SERVICE**

#### Research

2023 Shadow Program Committee member for EuroSys'23 - 18<sup>th</sup> European Conference on Computer Systems.

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

# **PUBLICATIONS**

## **Conferences and Workshops**

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

- 2022 winner, BlackHat ASIA cybersecurity conference Student Scholarship, Singapore
- 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 1st prize, 15<sup>TH</sup> CLUSIT thesis prize to *A Micro-Architectural Red Pill*, Online winner, Blackhat EU cybersecurity conference *Student Scholarship*, Online 1st place with TheRomanXploit, CSAW '20 *Embedded Cybersecurity Challenge Finals*, Online
- 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 ITALIAN: Native