

Luca Borzacchiello

Curriculum Vitae

PhD student in computer engineer. Interested in program analysis and cybersecurity.

Qualifications

- 2018 – now **Ph.D. in Engineering in Computer Science**, *Sapienza University of Rome*, Rome.
- 2016 – 2018 **Master of Science in Engineering in Computer Science**, *Sapienza University of Rome*, Rome, *110 cum laude*.
Cybersecurity curriculum. GPA: 29.64. Courses held in English.
- 2013 – 2016 **Ingegneria Informatica e Automatica**, *Sapienza University of Rome*, Rome.
110 cum laude, GPA: 29.19

Educational Experiences

- Sep 2019 **Admitted to Summer School**, *System Security School*, Padua.
2019 International Summer School on "System Security" (S3).
- Jul 2019 **Admitted to Summer School**, *Summer School on Hot Topics in Cybersecurity*, Rome.
International Cybersecurity Summer School.
- from Nov 2017 **Admitted to Honors Program (Percorso di Eccellenza)**, *Master at Sapienza*, Rome,
to July 2018 Advisor: Prof. Camil Demetrescu.
Research activity on Symbolic Execution.
- from Mar 2017 **Admitted to cybersecurity course**, *CyberChallenge.IT*, Rome, 66 h.
to June 2017 Italian training program in cybersecurity for talented students of age 17-23, organized by
CINI and Sapienza.
- May 2017 **Admitted to Summer School**, *PLISS Summer School*, Bertinoro.
First International Programming Language Implementation Summer School.
- July 2016 **Admitted to Summer School**, *ECOOP Summer School*, Rome.
Programming languages summer school with technical and mentoring sessions for a career
in research.
- from Nov 2014 **Admitted to Honors Program (Percorso di Eccellenza)**, *Bachelor at Sapienza*, Rome,
to July 2016 Advisor: Prof. Camil Demetrescu.
Research activity on Symbolic Execution.

Publications

- o Luca Borzacchiello, Emilio Coppa, Camil Demetrescu. **Fuzzing Symbolic Expressions**. *International Conference on Software Engineering (ICSE)*, 2021.
- o Luca Borzacchiello, Emilio Coppa, Daniele Cono D'Elia, Camil Demetrescu. **Memory Models in Symbolic Execution: Key Ideas and New Thoughts**. *Software Testing, Verification and Reliability*, 2019.
- o Marco Angelini, Graziano Blasilli, Luca Borzacchiello, Emilio Coppa, Daniele Cono D'Elia, Camil Demetrescu, Simone Lenti, Simone Nicchi, Giuseppe Santucci. **SymNav: Visually Assisting Symbolic Execution**. *IEEE Symposium on Visualization for Cyber Security (VizSec)*, 2019.
- o Luca Borzacchiello, Emilio Coppa, Daniele Cono D'Elia, Camil Demetrescu. **Reconstructing C2 Servers for Remote Access Trojans with Symbolic Execution**. *International Symposium on Cyber Security Cryptology and Machine Learning (CSCML)*, 2019.

———— Presentations

- 23/10/2019 **SymNav: Visually Assisting Symbolic Execution**, *Presentation*, IEEE Symposium on Visualization for Cyber Security (VizSec), Vancouver, Canada.
- 27/06/2019 **Reconstructing C2 Servers for Remote Access Trojans with Symbolic Execution**, *Presentation*, 3rd International Symposium on Cyber Security Cryptology and Machine Learning (CSCML), Be'er Sheva, Israel.

———— Teaching Experiences

- from Mar 2019 to Jul 2019 **Teaching assistant of Functional and Parallel Programming course**, *Sapienza University of Rome*, Rome.
- from Sep 2018 to Gen 2019 **Teaching assistant of Functional and Parallel Programming course**, *Sapienza University of Rome*, Rome.
- from Mar 2017 to Jul 2018 **Teaching assistant of Computer Systems course**, *Sapienza University of Rome*, Rome.

———— Awards

- Completed *flare-on 6* reverse engineering challenge. Organized by FireEye. 2019
- Third place in penetration testing at *CyberChallenge.IT*. Organized by Sapienza. 2017