

Juan Manuel COPIA

PhD Student

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PERSONAL WEBSITE <https://juanmacopia.github.io>

EMPLOYMENT HISTORY

- SINCE 2021 **Research Assistant**
IMDEA Software Institute, Madrid, Spain.
- 2019 - 2020 **Research Scholarship**
Department of Computer Science, University of Río Cuarto, Argentina.
- SUMMER 2019 **Summer Internship**
McAfee, Argentina.
- 2018 - 2019 **Student Teaching Assistant**
Department of Computer Science, University of Río Cuarto, Argentina.

EDUCATION

- SINCE 2021 **Ph.D. in Computer Science**
Universidad Politécnica de Madrid, Madrid, Spain.
- 2015 - 2020 **Undergraduate degree in Computer Science** (5-year + thesis)
Department of Computer Science, University of Río Cuarto, Argentina. GPA: 9.02.
- 2015 - 2018 **Undergraduate degree in Computer Science** (3-year + final project)
Department of Computer Science, University of Río Cuarto, Argentina. GPA: 8.81.

PUBLICATIONS

- OCTOBER 2023 **Precise Lazy Initialization for Programs with Complex Heap Inputs**
J. M. Copia, F. Molina, N. Aguirre, M. Frias, A. Gorla, P. Ponzio.
IEEE International Symposium on Software Reliability Engineering, ISSRE 2023, Florence, Italy. (Recently accepted paper)
- OCTOBER 2022 **LISSA: Lazy Initialization with Specialized Solver Aid**
J. M. Copia, P. Ponzio, N. Aguirre, A. Gorla, M. Frias.
IEEE/ACM International Conference on Automated Software Engineering, ASE 2022, Oakland Center, Michigan, USA.
- MAY 2022 **Use of Test Doubles in Android Testing: An In-Depth Investigation**
M. Fazzini, C. Choi, J. M. Copia, G. Lee, Y. Kakehi, A. Gorla, A. Orso.
ACM/IEEE International Conference on Software Engineering, ICSE 2022, Pittsburgh, USA.

OPEN-SOURCE SOFTWARE ARTIFACTS

- [LISSA AND PLI](#) Symbolic execution techniques for programs with complex heap.
- [SYMSOLVE.](#) A solver for structural constraints of heap-allocated objects.
- [PYSEAT.](#) A symbolic execution engine for python programs.

OTHERS

Research Topics: My main research interests are related to software testing and program analysis. Particularly, my latest research is focused on symbolic execution.

Talks: Presented at [IMDEA SOFTWARE S3 SEMINAR SERIES](#), [FACAS 2022](#) and [ASE 2022](#)

Spoken Languages: English, Spanish and French.

Cultural Experiences: 5 month academic exchange in Chile, 4 month cultural immersion in France.