MAFALDA *FERREIRA*

PHD STUDENT & JUNIOR RESEARCHER

PROFILE

I am a PhD student in Computer Science and Engineering at IST and a junior researcher at INESC-ID, as part of the SysSec team.
I am interested in Web security and privacy. Specifically, my research focus on developing systems based on static analysis techniques to identify security vulnerabilities and privacy violations in JavaScript code.

PERSONAL INFORMATION

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WORK EXPERIENCE

2021 - Today   **Junior Researcher**
INESC-ID, Lisbon, Portugal

2019 - 2023   **Teaching Assistant**
Instituto Superior Técnico, University of Lisbon, Lisbon, Portugal
- *Software Engineering - Spring 2023/23, Spring 2021/22, Spring 2020/21, Spring 2019/20*
- *Operating Systems - Fall 2020/21, Fall 2019/20*

PUBLICATIONS

RuleKeeper: GDPR-Aware Personal Data Compliance for Web Frameworks
Mafalda Ferreira, Tiago Brito, José Fragoso Santos and Nuno Santos
In *Proceedings of the 44th IEEE Symposium on Security and Privacy* (S&P). May, 2023.
DOI: 10.1109/SP46215.2023.00058

Study of JavaScript Static Analysis Tools for Vulnerability Detection in Node.js Packages.
Tiago Brito, Mafalda Ferreira, Miguel Monteiro, Pedro Lopes, Miguel Barros, José Fragoso Santos, Nuno Santos.
IEEE Transactions on Reliability, 2023.
DOI: 10.1109/TR.2023.3286301

Poster: A Systems Approach to GDPR Compliance-by-Design in Web Development Stacks
Mafalda Ferreira, Tiago Brito, José Fragoso Santos and Nuno Santos
In *Proceedings of the 2022 ACM SIGSAC Conference on Computer and Communications Security* (CCS), 2022.
DOI: 10.1145/3548606.3563521

EDUCATION

2021 - Today   **Enrolled in PhD in Computer Science and Engineering**
Instituto Superior Técnico, University of Lisbon, Lisbon, Portugal

2018 - 2021   **MsC in Information Systems and Computer Engineering**
Instituto Superior Técnico, University of Lisbon, Lisbon, Portugal
Specialization in Cyber-Security. Final grade: 18/20

2014 - 2018   **Bachelor's degree in Information Systems and Computer Engineering**
Instituto Superior Técnico, University of Lisbon, Lisbon, Portugal

AWARDS AND SCHOLARSHIPS

Excellence Teaching Award
Instituto Superior Técnico | 2022, 2023

Merit Diploma
Instituto Superior Técnico | 2020, 2019, 2015

PhD Scholarship
Fundação para a Ciência e Tecnologia | 2022-Present

Merit Scholarship
Xpand IT | 2017-2019

OTHER SKILLS

Programming
JavaScript/Node.js, Cypher/Neo4j, Python

Languages
Portuguese (native speaker), English (Proficient)