

André Nascimento

Rua da Capela, 61A
2500-304, Caldas da Rainha
☎ (+351) 914409368

✉ andrefftascimento@outlook.com

🌐 Webpage 🐙 Github in LinkedIn

Curriculum Vitae

Education

- 2024.09 - present **Doctoral Degree in Computer Science & Engineering.**
Instituto Superior Técnico, University of Lisbon
EQF level 8 | Credits: 180
- 2021.09 - 2023.10 **Master's Degree in Computer Science & Engineering.**
Instituto Superior Técnico, University of Lisbon
EQF level 7 | Final Grade: 18/20 | Credits: 120
Thesis A Typed Intermediate Language for Specifying the ECMAScript Standard
- 2018.09 - 2021.07 **Bachelor's Degree in Computer Science & Engineering.**
Instituto Superior Técnico, University of Lisbon
EQF level 6 | Final Grade: 17/20 | Credits: 180

Research Experience

- 2025.03 - 2025.11 **First Stage Researcher (R1) | Project WebCap.**
INESC-ID, Lisbon, Portugal
Worked on the scraper that will collect data from the web via automated program synthesis.
- 2023.10 - 2024.10 **First Stage Researcher (R1) | Project SmartRetail.**
INESC-ID, Lisbon, Portugal
Formalized and implemented a symbolic fuzzer to generate security exploits for Node.js applications.
Submitted the paper "Automated Exploit Generation for Node.js Packages", accepted at PLDI'25.
- 2023.02 - 2023.07 **First Stage Researcher (R1) | Project DIVINA.**
INESC-ID, Lisbon, Portugal
Developed a reference interpreter for the 6th version of the JavaScript standard, which served as the foundation for a new symbolic execution tool for JavaScript.

Teaching Experience

- Spring 2026 **Teaching Assistant | ESof2: Software Engineering.**
Instituto Superior Técnico, University of Lisbon
- Spring 2023 **Teaching Assistant | ESof2: Software Engineering.**
Instituto Superior Técnico, University of Lisbon
- Fall 2022 **Teaching Assistant | FProg-2: Foundations of Programming.**
Instituto Superior Técnico, University of Lisbon
- Spring 2022 **Teaching Assistant | ESof2: Software Engineering.**
Instituto Superior Técnico, University of Lisbon

Publications

- PLDI'25 **Automated Exploit Generation for Node.js Packages.**
F. Marques, M. Ferreira, A. Nascimento, M. Coimbra, N. Santos, L. Jia, J. Fragoso Santos.
In Proc. of the 46th ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI 2025).
📄 Citations: 8 📈 Core Rank: A* 📄 Length: 26 pages

Research & Invited Talks

- PL@LX Epsilon **How to Find and Exploit Vulnerabilities in Node.js Packages?.**
A. Nascimento and F. Marques,
Invited talk at the Programming Languages Lisbon group meetup, hosted by OutSystems
- POPL'26 **How to Identify Security Vulnerabilities in Node.js Packages?.**
J. Fragoso Santos, F. Marques, A. Nascimento
Theory and Practice of Static Analysis (TPSA) Workshop

Fellowships & Awards

- 2025.08.02 **FCT PhD Scholarship**, *Fundação para a Ciência e Tecnologia, Portugal.*
Fully-funded PhD scholarship.
- 2022.07.01 **Winner of an Award on a Software Engineering Context**, *Celfocus/Novabase.*
Together with Duarte Bento and Susana Monteiro.

Academic Achievements & Recognitions

- 2021/2022 **Academic Merit Diploma**, *Instituto Superior Técnico, University of Lisbon*
- 2020/2021 **Academic Excellency Diploma**, *Instituto Superior Técnico, University of Lisbon*
- 2019/2020 **Academic Merit Diploma**, *Instituto Superior Técnico, University of Lisbon*
- 2018/2019 **Academic Merit Diploma**, *Instituto Superior Técnico, University of Lisbon*

Volunteering & Other Activities

- 2023.06 - present **Sports Association Board Secretary.**
B.W.C.R – Clube de Calistenia das Caldas da Rainha, Caldas da Rainha, Portugal
Responsible for overseeing internal administrative operations, coordinating board meetings, and managing official documentation.
- 2025.06 **Volunteer in PLDI'25.**
46th ACM SIGPLAN Conference on Programming Language Design and Implementation.
- 2020/2021 **Mentoring Programme 2020/21.**
Núcleo de Apoio ao Estudante (NAPE), Instituto Superior Técnico, University of Lisbon.

Other Skills

- Languages Portuguese (native speaker) • English (professional proficiency)
- Programming OCaml, JavaScript/TypeScript, C/C++, Java, Python