Eric García Arribas

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Work Experience

Research Intern in Processor Fuzzing Sep. 2024 – Dec. 2024
CISPA Helmholtz Center for Information Security | Advisor: Michael Schwarz Saarbrücken, Germany
→ Adapted ETH Zurich's Cascade (a RISC-V processor fuzzer) to fuzz for XuanTie's C906 and C910 RISC-V processors, additionally running experiments regarding performance and bug finding capabilities.

Research Intern in Microarchitectural Fuzzing Feb. 2023 – May. 2023
IMDEA Software Institute | Advisor: Marco Guarnieri Madrid, Spain
→ Developed a RISC-V extension for Microsoft's Revizor, a microarchitectural fuzzer that uses Unicorn and gem5 focused on detecting speculative execution vulnerabilities based on speculation contracts.

Education

Exchange Semester (Master's-Level Courses) Feb. 2025 – Jul. 2025
Technische Universität Graz – Grade Avg.: 1.696 ($\simeq 8.7/10$) Graz, Styria, Austria
→ Coursework (34.5 ECTS): Side-Channel Security, Pentesting, Cloud Operating Systems, GPU Programming, Software Technology, Software Maintenance, Natural Language Processing

Master's Degree in Computer Engineering Sep. 2023 – Jul. 2025
Universidad Politécnica de Madrid – Grade Avg.: 8.55 / 10 Boadilla del Monte, Madrid, Spain

Bachelor's Degree in Computer Engineering Sep. 2019 – Jun. 2023
Universidad Politécnica de Madrid Boadilla del Monte, Madrid, Spain

Publications

Automatic Discovery of User-exploitable Architectural Security Vulnerabilities in Closed-Source RISC-V CPUs October 2025
ACM CCS 2025 Paper on RISC-V Processor Fuzzing [PDF]

Analyzing the Applicability of Academic CPU Fuzzers to Real World CPUs July 2025
Master's Thesis [PDF]

Fuzzing RISC-V Processors for Speculative Leaks June 2023
Bachelor's Thesis [PDF]

Languages

1. **Spanish**: Native
2. **English**: Cambridge Advanced C1
3. **German**: Goethe Certificate B2 (Avg. 85.75/100)

* **Basic proficiency ($\leq B1$)**: Russian

Programming Languages

Working Experience: Python, C, Bash scripting, Assembly (x86, RISC-V), SystemVerilog.
Heavy Course Experience (≥ 5 courses): Java, C++, MATLAB, R.
Light Course Experience: regex, Prolog, C#, VHDL, ADA.

Further Digital Skills

Computer Science (theoretical): Fuzzing, compilers, assembly languages, operating systems, microarchitectures, automata theory, data structures, concurrency, basic data analysis, Intel virtualization, basic pentesting, common software project process models (Agile, Waterfall, ...), common software project development methodologies (CI/CD pipelines, basic code review etiquette, ...), static & dynamic program analysis
Data Manipulation: JSON, SQL, XML, CSV
Development & **Writing:** LaTeX, Git, GDB, JUnit, AWS, Buildroot, Markdown, GTKWave

Community Service

Member of the USENIX Security '26 Artifact Evaluation Committee

Miscellaneous Skills

Soft Skills: Have work experience in international settings where communication with colleagues is key to solve problems of common interest for an organization, successfully leading to an ACM paper published in October 2025
Driver's License: Owner of a driver's license since Feb. 2022