Andrés Sánchez Marín

15 June 1997   Madrid, Spain
andres.sanchez@epfl.ch   andsanmar.github.io

PROFESSIONAL EXPERIENCE

HexHive group, EPFL   Lausanne, Switzerland
Research Assistant   **Sep 2019 − present**

Massachusets Institute of Technology   Cambridge, United States
Visiting Student   **Jun 2019 − Aug 2019**

IMDEA Software Institute   Madrid, Spain
Research Internship   **Sep 2018 − Jun 2019**
  Reasoning about speculative execution attacks and existing proposals for counter-
  measures. Detecting speculative information flows in large code-bases

Distributed Systems Laboratory at UPM   Madrid, Spain
Internship   **Sep 2017 − Dec 2017**
  Designing and implementing the integration between a Elastic Complex Event
  Processing for Static and Streaming Data and a NoSQL distributed database

Cisco, NBA   Madrid, Spain
NBA NetAcad Dream Team member   **Oct 2016**
  In the NBA Global Games (Madrid). Working on the network infrastructure for
  the event and helping in its installation

EDUCATION

École Polytechnique Fédérale de Lausanne   Lausanne, Switzerland
Master of Science in Computer Science   **2019 − 2021**

Universidad Politécnica de Madrid   Madrid, Spain
Bachelor of Science in Mathematics and Computing   **2015 − 2019**
  Member of ACM UPM chapter

AREAS OF INTEREST

My main research interest is the development of reliable and optimized software, focusing in the correct systems
implementations and the methods to produce efficient and secure code.

Computer Systems	Security
Programming Languages & Paradigms	Software Optimizations
Algorithms and Data Structures	Hardware Architecture
Formal Verification	Theoretical Foundations of Computer Science

SKILLS

LANGUAGES	Spanish (mother tongue)
	English (fluent) − 90 TOEFL iBT
PROGRAMMING	C, Prolog, Linux, Haskell, Git
	Assembly, LaTeX, Rust, Python
ACHIEVEMENTS	10 honors in various subjects on Bachelor's degree
OTHERS	CCNA 1 & 2
	Free Time Monitor Certification
VOLUNTEER EXPERIENCE	Sumac Wasi "Santo Tomás de Aquino" enhancement project during 2018 summer as a collaborator, also doing recreational and learning activities with a group of 40 kids on a marginal Arequipa (Perú) area.

CONFERENCE PUBLICATIONS

- M. Guarnieri, B. Koepf, J. F. Morales, J. Reineke, and A. Sánchez. SPECTECTOR: Principled detection of speculative information flows. In *Proceedings of the 41st IEEE Symposium on Security and Privacy*. IEEE, 2020

- P.-A. Tsai, A. Sanchez, C. Fletcher, and D. Sanchez. The security pitfalls of memory hierarchy compression: New side channels and attacks on compressed caches. In *Proceedings of the Twenty-Fifth International Conference on Architectural Support for Programming Languages and Operating Systems*, ASPLOS '20. ACM, 2020