# Andrés Sánchez Marín

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

### PROFESSIONAL EXPERIENCE

HexHive group, EPFL

Research Assistant

Lausanne, Switzerland

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

Research Internship

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

Designing and implementing the integration between a Elastic Complex Event

Sep 2017 – Dec 2017

Cisco, NBA Madrid, Spain

Oct 2016

NBA NetAcad Dream Team member

On the NBA Global Games (Madrid). Learning how to do the network infrastructure for the event. Also, helping installing it

Processing for Static and Streaming Data and a NoSQL distributed database

#### **EDUCATION**

École Polytechnique Fédérale de LausanneLausanne, SwitzerlandMaster of Science in Computer Science2019 – 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 on the correct systems implementations and the methods to produce efficient and secure code. Result of the intersection between the Computer Systems, Security, Programming Languages & Paradigms (specially functional and low level ones), Software Optimizations, Algorithms and Data Structures, Hardware Architecture, Formal Verification and Theoretical Foundations of Computer Science.

# **SKILLS**

LANGUAGES Spanish (mother tongue)

English (fluent) — 90 TOEFL iBT

PROGRAMMING Rust, Prolog, Linux, C, Git

Assembly, LATEX, Haskell, 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