

# Julien Gamba

Internet Measurement Researcher

 jgamba.eu  lukhio  juliengamba  julien@jgamba.eu  +33 (0)6 68 59 08 94

I am a computer scientist performing Internet measurement research at Cisco ThousandEyes as a senior data scientist. Always driven by curiosity, I initially focused on BGP with a keen interest for privacy and security, which led me to work on the Android operating system for my PhD thesis. I am now working on endpoint network monitoring.

## EXPERIENCE

### CISCO THOUSANDEYES | SENIOR DATA SCIENTIST

2022 – 2024 | Working remotely from Madrid, Spain

- I am part of Cisco ThousandEyes' research team, working on endpoint monitoring. I am responsible for designing and developing novel and innovative algorithms to improve the quality and accuracy of our network monitoring platform.
- I am leading the work on dynamic tests, i.e., the monitoring of native apps and single-page applications, ensuring our endpoint agent accurately measure their network performance.
- I designed a media flow detection algorithm for video-conferencing apps now used by close to 400 000 users in production, and participated in the submission of 3 US patents.

### IMDEA NETWORKS INSTITUTE | ASSISTANT RESEARCHER

2017 - 2022 | Madrid, Spain

- My thesis focuses on the software supply chain of Android devices and its openness, and measuring the consequences for users' privacy and security.
- Pre-installed apps are usually not publicly available and run with a higher level of privilege, which creates unprecedented risks for users.
- I designed a crowd-sourcing method to collect upwards of 1.5 million apps pre-installed on real users devices and developed tools to analyze said apps, bringing to light numerous privacy and security issues.

### ICUBE LABORATORY | ASSISTANT RESEARCHER

2017 | Strasbourg, France

- I designed rules for the conception of IGP and iBGP topologies that ensure BGP stability and correctness when using route reflectors.

## SELECTED PUBLICATIONS

Full publication list with PDFs available at: <https://jgamba.eu/publications.html>

### LOG:IT'S BIG, IT'S HEAVY, IT'S FILLED WITH PERSONAL DATA! MEASURING THE LOGGING OF SENSITIVE INFORMATION IN THE ANDROID ECOSYSTEM |

USENIX SECURITY 2023

A. Lyons, **J. Gamba**, A. Shawaga, J. Reardon, J. Tapiador, S. Egelman, N. Vallina-Rodríguez

### AN ANALYSIS OF PRE-INSTALLED ANDROID SOFTWARE | IEEE SYMPOSIUM ON SECURITY AND PRIVACY 2020

**J. Gamba**, M. Rashed, A. Razaghpanah, J. Tapiador & N. Vallina-Rodríguez

### A LONG WAY TO THE TOP: SIGNIFICANCE, STRUCTURE, AND STABILITY OF INTERNET TOP LISTS | ACM INTERNET MEASUREMENT CONFERENCE 2018

Q. Scheitle, O. Hohlfeld, **J. Gamba**, J. Jelten, T. Zimmermann, S. D. Strowes, & N. Vallina-Rodríguez

## EDUCATION

### UNIVERSIDAD CARLOS III DE MADRID

PHD IN COMPUTER SCIENCE

2022 | Madrid, Spain

Thesis: "Do Android Dream of Electric Sheep? On Privacy in the Android Supply Chain

Graduated "sobresaliente" cum laude

### UNIVERSITÉ DE STRABOURG

MASTER IN COMPUTER SCIENCE

2017 | Strasbourg, France

Thesis: Conception rules for IGP and iBGP topologies to ensure BGP correctness

Ranked 1<sup>st</sup> out of 17 students

## AWARDS

### Best practical paper IEEE

Symposium on Security and Privacy, 2020

**Google PhD Fellowship** recipient privacy and security, 2020

**Consumer Reports Digital Lab Fellowship** recipient, 2020

**AEPD Emilio Aced Prize**, for our paper on pre-installed Android applications, 2020

**NortonLifeLock PhD Fellowship** recipient, 2019

**CNIL-INRIA Privacy Protection Award**, for our paper on pre-installed Android applications, 2019

**ACM IMC'18, community contribution award** for our paper on Internet top-lists, 2018

**RIPE 74, RACI recipient** to present our work on BGP fragmentation, 2017