

# NARSEO VALLINA-RODRIGUEZ

## Curriculum Vitae

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IMDEA Networks Institute  
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🌐 [http://people.networks.imdea.org/~narseo\\_vallina/](http://people.networks.imdea.org/~narseo_vallina/)

Google Scholar: <https://scholar.google.es/citations?user=yO1NzfcAAAAJ>

ORCID: <https://orcid.org/0000-0002-5420-6835>

### Research interests

Internet measurements, network protocols, privacy and security, transparency, adTech, consumer protection, and privacy regulation.

### Education

- 2009-2013 **Ph.D in Computer Science, University of Cambridge (U.K.)**  
Thesis: Cross-layer analysis of energy and spectrum waste of mobile applications  
Advisor: Prof. Jon Crowcroft
- 2001-2007 **Telecommunications Engineering, University of Oviedo (Spain)**  
MSc dissertation completed at the University of Cambridge  
Advisors: Prof. Jon Crowcroft (University of Cambridge) and Prof. Roberto Garcia (University of Oviedo)

### Experience

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|--------------|--|---------------------|
| 2019-Present | <b>AppCensus Inc.</b><br>Co-Founder  | San Francisco (USA) |
| 2016-Present | <b>IMDEA Networks Institute</b><br>Research Assistant Professor            | Madrid (Spain)      |
| 2014-Present | <b>International Computer Science Institute</b><br>Research Scientist      | Berkeley (USA)      |
| 2013-2014    | <b>International Computer Science Institute</b><br>Postdoctoral Researcher | Berkeley (USA)      |
| 2009-2013    | <b>University of Cambridge</b><br>Undergraduate Student Supervisor         | Cambridge (U.K.)    |
| 2011, 2012   | <b>Telefonica Research</b><br>Research Intern                              | Barcelona (Spain)   |
| 2009         | <b>T-Labs (Telekom Innovation Labs)</b><br>Research Intern                 | Berlin (Germany)    |
| 2008-2009    | <b>Vodafone R&amp;D</b><br>Research Engineer                               | Newbury (U.K.)      |
| 2007         | <b>Telefonica Research</b><br>Research Intern                              | Barcelona (Spain)   |
| 2006-2007    | <b>University of Cambridge</b><br>Visitor Student                          | Cambridge (U.K.)    |

### Awards and recognition

- 2020 **IEEE Symposium on Security and Privacy (S&P). Best Practical Paper Award**  
*An Analysis of Pre-installed Android Software*, with J. Gamba, M. Rashed, A. Razaghpanah and J. Tapiador.

- CNIL-INRIA Privacy Award**  
*An Analysis of Pre-installed Android Software*, with J. Gamba, M. Rashed, A. Razaghpanah and J. Tapiador.
- AEPD Emilio Aced Award**  
*An Analysis of Pre-installed Android Software*, with J. Gamba, M. Rashed, A. Razaghpanah and J. Tapiador.
- 2019 **USENIX Security Symposium. Distinguished Paper Award**  
*50 Ways to Leak Your Data: An Exploration of Apps' Circumvention of the Android Permissions System*, with J. Reardon, A. Feal, P. Wijesekera, A. Elazari Bar On, and S. Egelman.
- 2018 **Google Faculty Research Award**  
**ACM IMC. Distinguished Paper Award**  
*Coming of age: A longitudinal study of TLS deployment*, with P. Kotzias, A. Razaghpanah, J. Amann, K. Paterson, and J. Caballero.  
**ACM IMC. Community Contribution Award**  
*A long way to the top: significance, structure, and stability of internet top lists*, with Q. Scheitle, O. Holfeld, J. Gamba, J. Jelten, T. Zimmermann, and S. Strowes.
- 2017 **IETF/IRPF Applied Networking Research Prize**  
*A multi-perspective analysis of carrier-grade NAT deployment*, with P. Richter, F. Wohlfart, M. Allman, R. Bush, A. Feldmann, C. Kreibich, N. Weaver, and V. Paxson.  
**ACM Mobicom App Contest Finalist**  
*Lumen Privacy Monitor App*
- 2016 **Data Transparency Lab Grant (50K Euro)**
- 2015 **ACM HotMiddlebox. Best-paper Award**  
*Header enrichment or ISP enrichment?: Emerging privacy threats in mobile networks*, with S. Sundaresan, C. Kreibich, and V. Paxson.  
**Selected to attend the NSF NeTS Early Career Workshop**
- 2014 **ACM CoNEXT. Best Short-paper Award**  
*A tangled mass: The Android root certificate stores*, with J. Amann, N. Weaver, C. Kreibich and V. Paxson.
- 2013 **ACM CoNEXT. Runner-up for Best Paper Award**  
*When David helps Goliath: the case for 3G onloading*, with V. Erramilli, Y. Grunenberger, L. Gyarmati, N. Laoutaris, R. Stanojevic, and K. Papagiannaki
- 2012 **Qualcomm Innovation Fellowship**
- 2010-2012 **Fitzwilliam College Scholarship**
- 2009-2012 **Cambridge European Trust Fellowship (2.5K GBP/Year)**
- 2009-2011 **Fundesfor Scholarship**
- 2007 **Honorable Mention for the MsC dissertation.** University of Oviedo

## Funded projects and grants

- |           |  |         |
|-----------|--|---------|
| 2019      | <b>Comunidad de Madrid / EU Social Fund</b><br>Principal investigator. <i>Youth Employment Initiative Program</i>  | €35K    |
| 2019-2020 | <b>NSA</b><br>PI (Co-PIs: Serge Egelman and Michael C. Tschantz, ICSI). <i>Scalable Privacy Analysis</i>   | \$194K  |
| 2019      | <b>AEPD</b><br>Principal investigator. <i>The Mobile Tracking Industry in Android Devices</i>  | €18K    |
| 2019      | <b>BBVA</b><br>Co-PI (PI: Juan Tapiador, UC3M). <i>Alternativas en la Atribucion de Identidad Digital</i>  | €17.5K  |
| 2019      | <b>Google Faculty Grant</b><br>Co-PI (PI: Rishab Nythianand, University of Iowa). <i>Unveiling Entity Relationships in Online Data Markets</i>   | \$40.5K |
| 2019-2020 | <b>Comunidad de Madrid (P2018/TCS-4499)</b><br>Researcher (PI: Antonio Fernandez Anta, IMDEA Networks). <i>EDGEDATA-CM. Una infraestructura para sistemas híbridos altamente descentralizados.</i> | €703K   |

2018-2021	<b>NSF SaTC TTP (CNS-1817248)</b> Collaborator (PI: Serge Egelman, ICSI). <i>SaTC: TTP: Small: Mobile Dynamic Privacy and Security Analysis at S</i>	\$515K
2018-2020	<b>EU H2020 (Contract 786741)</b> Principal investigator. <i>GDPR Compliance Cloud Platform for Micro Enterprises (SMOOTH)</i>	€3.3M (IMDEA share: €250K)
2018-2019	<b>MINECO (Contract 786741)</b> Researcher (PI: Vincenzo Mancuso / Antonio Fernandez Anta, IMDEA Networks). <i>DiSCoEdge: Almacenamiento y computación distribuida en el borde (de la red)</i>	€64K
2017	<b>Telefonica</b> Principal Investigator. <i>Transparency API</i>	€30K
2016-2020	<b>NSF (Contract CNS-1564329)</b> Principal investigator. <i>Medium: HayStack: Fine-grained Visibility and Control of Mobile Traffic for Enhanced Performance, Privacy and Security</i>	\$1.0M
2016	<b>Data Transparency Labs Grant</b> Principal Investigator. <i>Characterizing Indirect Privacy Leaks in Mobile Apps</i>	€50K
2016-2018	<b>EU H2020 (Contract 653449)</b> Researcher (PI: Arturo Azcorra, IMDEA Networks). <i>Towards transparency and privacy in the online advertising busines (TYPES)</i>	€4.6M (IMDEA Share: €446.250K)
2015-2019	<b>NSF (Contract CNS-1518918)</b> Researcher (PI: Vern Paxson, ICSI). <i>TTP Option: Large: Collaborative: Towards a Science of Censorship Resistance</i>	\$1.8M
2012-2019	<b>NSF (Contract CNS-1237265)</b> Researcher (PI: Vern Paxson, ICSI). <i>Frontier: Collaborative: Beyond Technical Security: Developing an Empirical Basis for Socio-Economic Perspectives</i>	\$4.6M
2012-2017	<b>NSF (Contract CNS-1213157)</b> Researcher (PI: Mark Allman, ICSI). <i>Large: Collaborative Research: User-Centric Network Measurement</i>	\$721K
2012-2015	<b>DHS (Contract N66001-12-C-0128)</b> Researcher (PI: Nicholas Weaver, ICSI). <i>Netalyzr NG: Monitoring DNS, DNSSEC, and TLS from the Edge</i>	\$952K
2012	<b>Qualcomm Innovation Fellowship</b>	10K GBP
2012	<b>ACM SIGCOMM Student Travel Grant</b>	\$900
2010	<b>ACM SIGCOMM Student Travel Grant</b>	\$1,175
2009-2012	<b>Cambridge European Trust Fellowship</b>	2.5K GBP/year
2009	<b>ACM SIGMOBILE MobiSys Student Travel Grant</b>	\$600

## Community service

PC chair	2016	1st ACM MobiSys Workshop on Mobile Data (MOBIDATA)
Demo co-chair	2020	ACM Mobicom
Workshop co-chair	2018	ACM CoNEXT
Best-paper award committee	2019	ACM IMC
PC member	2020	ACM SIGSAC Conference on Computer and Communications Security (CCS) ACM Internet Measurements Conference (IMC) Privacy Enhancing Technologies Symposium (PETS)
	2019	ACM Internet Measurements Conference (IMC) IEEE/IFIP TMA Conference (TMA) Passive and Active Measurements (PAM) Privacy Enhancing Technologies Symposium (PETS)
	2018	ACM CoNEXT ACM Internet Measurements Conference (IMC) Privacy Enhancing Technologies Symposium (PETS) ACM Workshop on IoT S&P (Co-located with ACM SIGCOMM) IEEE HotPOST (Co-located with IEEE INFOCOM) IEEE/IFIP TMA Conference (TMA)

		ACM HotMobile Passive and Active Measurements (PAM) Conference on Fairness, Accountability, and Transparency (FAT)
	2017	ACM CoNEXT ACM Workshop on IoT S&P (Co-located with ACM SIGSAC CCS) IEEE/IFIP TMA Conference Passive and Active Measurements (PAM) ACM BIG DAMA Workshop (Co-located with ACM SIGCOMM) ACM Mobilesoft (New Ideas Track)
	2016	ACM CoNEXT Student Workshop Spring School on Networks (SSN), NICLabs Chile. ACM SIGCOMM GAIA Workshop IEEE Int. Workshop on TRaffic Analysis and Characterization (TRAC)
	2015	ACM CoNEXT Student Workshop IEEE Int. Workshop on TRaffic Analysis and Characterization (TRAC) Traffic Monitoring and Analysis Workshop (TMA) ACM Mobiquitous Poster Track
	2012	ACM S3 Workshop
Journal reviewer	2017	IEEE Transactions of Networking IEEE Communication Letters
	2016	SIGCOMM CCR
	2015	IEEE JSAC Special Issue on Measuring and Troubleshooting the Internet IEEE Transactions of Networking IEEE Internet Computing IEEE Communication Letters
	2014	IEEE Pervasive Computing IEEE Transactions of Mobile Computing
External reviewer	2014	IEEE UbiComp
	2013	ACM CoNEXT
Project evaluator	2020	External expert project evaluator for Universidad de Comillas (Spain)
Session chair	2019	ACM IMC. Session: <i>Ads</i> TMA. Session: <i>Are you experienced: QoE, streaming and Clouds</i>
	2018	ACM CoNEXT. Session: <i>Security</i> ACM IMC. Session: <i>Routing/Censorship</i> PETS. Session: <i>Tracking</i>
	2017	TMA. Session: <i>Privacy</i>
Student volunteer	2009	ACM Mobile Ubiquitous Multimedia (MUM)
	2006	IEEE Conference on Peer-to-Peer Computing (P2P)
Institutional service	2020	Member of IMDEA Networks's Ethical Board
	2019	Ph.D Students' Welcome Seminar
	2018	Developed IMDEA Networks Ethical Research Guidelines Co-organized IMDEA Networks Talklets Launched IMDEA Networks Reading Group
	2017	Co-organized IMDEA Networks' Annual Workshop 2017
	2016	Local host for Mozilla's Privacy Labs. June 2016 (ICSI)
College service / leadership roles	2011	Fitzwilliam College MCR Sports Officer
	2010	Fitzwilliam College MCR Social Secretary Fitzwilliam-Clare College MCR Football team Vice-captain

## PhD and MsC tribunal / jury membership

Ph.D tribunal	2020	<b>Mohammad Taha Khan</b>	UIC (USA)
	2019	<b>Abbas Razaghpanah</b>	SBU (USA)
		<b>Platon Kotzias</b>	IMDEA Software / UPM (Spain)
	2018	<b>PoI Mac Aonghusa</b>	Trinity College Dublin (Ireland)

Ph.D prelims	2019	<b>Imane Fouad</b> —Comite de Suivi Individuel	INRIA (France)
		<b>Mohammad Taha Khan</b>	UIC (USA)
	2018	<b>Abbas Razaghpanah</b>	SBU (USA)
MsC tribunal	2017	<b>Eduardo Acha</b>	Universidad de Chile (Chile)

## Publications

Bibliometrics	Citation count:	<b>1,775</b>
	h-index:	<b>24</b>
	i10-index:	<b>34</b>

Refereed  
journal  
papers

1. **Measuring the Global Recursive DNS Infrastructure: A View From the Edge**  
P. Callejo, R. Cuevas, N. Vallina-Rodriguez, A. Cuevas  
IEEE Access. Volume 7. Pages 168020-168028, 2019
2. **“Won’t Somebody Think of the Children?” Privacy Analysis at Scale: A Case Study With COPPA**  
I. Reyes, P. Wijesekera, J. Reardon, A. Elazari, A. Razaghpanah, N. Vallina-Rodriguez, and S. Egelman  
Proceedings of Privacy Enhancing Technologies (PoPETS), Volume 2018: Issue 3 (Jun 2018), 2018
3. **Header Enrichment or ISP Enrichment? Emerging Privacy Threats in Mobile Networks**  
N. Vallina-Rodriguez, S. Sundaresan, C. Kreibich, and V. Paxson  
ACM SIGCOMM CCR (Fast-tracked), Volume 45 Issue 4, October 2015, 2015 [JCR Impact Factor: 1.18 (Q2)]
4. **The scissors and the magnifying glass: Internet governance in the transitional Tunisian context**  
A. Artaud de la Ferriere, and N. Vallina-Rodriguez  
Journal of North African Studies, 2014 19(5), pp. 639-655, 2014
5. **When Assistance Becomes Dependence: Characterizing the Costs and Inefficiencies of A-GPS**  
N. Vallina-Rodriguez, A. Finamore, Y. Grunenberger, K. Papagiannaki, and J. Crowcroft  
ACM SIGMOBILE Mobile Computing and Communications Review (MC2R). Volume 17, Issue 4, 2013
6. **Energy Management Techniques in Modern Mobile Handsets**  
N. Vallina-Rodriguez, and J. Crowcroft  
IEEE Communications Surveys and Tutorials, Volume. 15, No. 1, 1s Quarter 2013, 2013 [JCR Impact Factor: 6.49 (Q1)]

Refereed  
conference  
papers

7. **Angel or Devil? A Privacy Study of Mobile Parental Control Apps**  
A. Feal, P. Calciati, N. Vallina-Rodriguez, C. Troncoso, A. Gorla  
Privacy Enhancing Technologies Symposium (PETS), 2020
8. **The Price is (not) Right: Comparing Privacy in Free and Paid Apps**  
C. Han, I. Reyes, A. Feal, J. Reardon, P. Wijesekera, N. Vallina-Rodriguez, S. Egelman  
Privacy Enhancing Technologies Symposium (PETS), 2020
9. **An Analysis of Pre-installed Android Software**  
J. Gamba, M. Rashed, A. Razaghpanah, J. Tapiador, N. Vallina-Rodriguez  
IEEE Symposium on Security and Privacy, 2020 [Acceptance Rate: 12.3%]  
**Best Practical Paper Award**
10. **Apophanies or Epiphanies: How Crawlers Can Impact Our Understanding of the Web**  
S. Suleman Ahmad, M. Daniyal Dar, R. Nithyanand, N. Vallina-Rodriguez, M. Fareed Zaffar  
The Web Conference (WWW), 2020 [Acceptance Rate: 19.0%]
11. **Encrypted DNS –¿ Privacy? A Traffic Analysis Perspective**  
S. Siby, M. Juarez, N. Vallina-Rodriguez, C. Diaz, C. Troncoso  
NDSS Symposium, 2020
12. **Tales from the Porn: A Comprehensive Privacy Analysis of the Web Porn Ecosystem**  
P. Vallina, A. Feal, J. Gamba, N. Vallina-Rodriguez, A. Fernandez-Anta

- ACM IMC, 2019 [Acceptance Rate: 19.7%]
13. **50 Ways to Leak Your Data: An Exploration of Apps' Circumvention of the Android Permissions Systems**  
J. Reardon, A. Feal, P. Wijesekera, A. Elazari Bar On, N. Vallina-Rodriguez, S. Egelman  
USENIX Security Symposium, 2019 [Acceptance Rate: 16.0%]  
**Distinguished Paper Award**
  14. **Coming of Age: A Longitudinal Study of TLS Deployment**  
P. Kotzias, A. Razaghpanah, J. Amann, K. G. Paterson, N. Vallina-Rodriguez, and J. Caballero  
ACM IMC, 2018 [Acceptance Rate: 24.0%]  
**Distinguished Paper Award**
  15. **Beyond Google Play: A Large-Scale Comparative Study of Chinese Android App Markets**  
H. Wang, Z. Liu, N. Vallina-Rodriguez, Y. Guo, L. Li, J. E. Tapiador, J. Cao, and G. Xu  
ACM IMC, 2018 [Acceptance Rate: 24.0%]
  16. **An Empirical Analysis of the Commercial VPN Ecosystem**  
M. Khan, J. de Blasio, G. Voelker, A. Snoeren, C. Kanich, N. Vallina-Rodriguez  
ACM IMC, 2018 [Acceptance Rate: 24.0%]
  17. **A Long Way to the Top: Significance, Structure, and Stability of Internet**  
Q. Scheitle, O. Hohlfeld, J. Gamba and J. Jelten, T. Zimmermann, S. Strowes, and N. Vallina-Rodriguez  
ACM IMC, 2018 [Acceptance Rate: 24.0%]  
**Community Contribution Award**
  18. **"Won't Somebody Think of the Children" Privacy Analysis at Scale: A Case Study With COPPA**  
I. Reyes, P. Wijesekera, J. Reardon, A. Elazari, A. Razaghpanah, N. Vallina-Rodriguez, and S. Egelman  
Privacy Enhancing Technologies Symposium (PETS), 2018 [Acceptance Rate: 16.0%]
  19. **The Cloud that Runs the Mobile Internet**  
F. Michelinakis, H. Doroud, A. Razaghpanah, A. Lutu, N. Vallina-Rodriguez, P. Gill and J. Widmer  
IEEE INFOCOM, 2018 [Acceptance Rate: 19.2%]
  20. **Bug Fixes, Improvements, ... and Privacy Leaks: A Longitudinal Study of PII Leaks Across Android App Versions**  
J. Ren, M. Lindorfer, D. J. Dubois, A. Rao, D. Choffnes and N. Vallina-Rodriguez  
NDSS Symposium, 2018 [Acceptance Rate: 21.5%]
  21. **Apps, Trackers, Privacy and Regulators: A Global Study of the Mobile Tracking Ecosystem**  
A. Razaghpanah, R. Nithyanand, N. Vallina-Rodriguez, S. Sundaresan, M. Allman, C. Kreibich, and P. Gill  
NDSS Symposium, 2018 [Acceptance Rate: 21.5%]
  22. **Studying TLS Usage in Android Apps**  
A. Razaghpanah, A. Niaki, N. Vallina-Rodriguez, S. Sundaresan, J. Amann, and P. Gill  
ACM CoNEXT, 2017 [Acceptance Rate: 18.0%]
  23. **Dissecting DNS Stakeholders in Mobile Networks**  
M. Almeida, A. Finamore, D. Perino, N. Vallina-Rodriguez, and M. Varvello  
ACM CoNEXT (Short paper), 2017 [Acceptance Rate: 18.0%]
  24. **A Multi-perspective Analysis of Carrier-Grade NAT Deployment**  
P. Richter, F. Wohlfart, N. Vallina-Rodriguez, M. Allman, R. Bush, A. Feldmann, C. Kreibich, N. Weaver, and V. Paxson  
ACM IMC, 2016 [Acceptance Rate: 24.7%]
  25. **An analysis of the Privacy and Security Risks of Android VPN Permission-enabled Apps**  
M. Ikram, N. Vallina-Rodriguez, S. Seneviratne, M.A. Kaafar, and V. Paxson  
ACM IMC, 2016 [Acceptance Rate: 24.7%]
  26. **Beyond the radio: Illuminating the higher layers of mobile networks**  
N. Vallina-Rodriguez, S. Sundaresan, C. Kreibich, N. Weaver, and V. Paxson  
ACM MobiSys, 2015 [Acceptance Rate: 13.2%]
  27. **A Tangled Mass: The Android Root Certificate Stores**  
N. Vallina-Rodriguez, J. Amann, C. Kreibich, N. Weaver, and V. Paxson

- ACM CoNEXT, 2014 [Acceptance Rate: 18.5%]  
**Best Short-paper Award**
28. **Staying Online While Mobile: The Hidden Costs**  
 A. Aucinas, N. Vallina-Rodriguez, Y. Grunenberger, V. Erramilli, K. Papagiannaki, J. Crowcroft and D. Whetherall  
 ACM CoNEXT, 2013 [Acceptance Rate: 18.1%]
29. **Surely You're Joking! 3G OnLoading?**  
 C. Rossi, N. Vallina-Rodriguez, V. Erramilli, Y. Grunenberger, L. Gyarmati, N. Laoutaris, R. Stanojevic, K. Papagiannaki, and P. Rodriguez  
 ACM CoNEXT, 2013 [Acceptance Rate: 20.2%]
30. **RILAnalyzer: A Comprehensive 3G Monitor on your Phone**  
 N. Vallina-Rodriguez, A. Aucinas, M. Almeida, Y. Grunenberger, K. Papagiannaki, and J. Crowcroft  
 ACM IMC (Short paper), 2013 [Acceptance Rate: 23.6%]
31. **Breaking for Commercials: Characterizing Mobile Advertising**  
 N. Vallina-Rodriguez, J. Shah, A. Finamore, Y. Grunenberger, H. Haddadi, K. Papagiannaki, and J. Crowcroft  
 ACM IMC, 2012 [Acceptance Rate: 24.6%]
32. **Los Twindignados: The Rise of the Indignados Movement on Twitter**  
 N. Vallina-Rodriguez, S. Scellato, H. Haddadi, C. Forsell, J. Crowcroft, and C. Mascolo  
 IEEE Socialcom, 2012 [Acceptance Rate: 20.0%]
- Book chapters
33. **Don't accept candies from strangers: An Analysis of third-party SDKs**  
 A. Feal, J. Gamba, N. Vallina-Rodriguez, P. Wijesekera, J. Reardon, S. Egelman, J. Tapiador  
 CPDP Conference Book, 2020
34. **The Case for Context-Aware Resources Management in Mobile Operating Systems**  
 N. Vallina-Rodriguez, P. Hui, and J. Crowcroft  
 Mobile Context Awareness, 2012
- Refereed workshop papers
35. **On The Ridiculousness of Notice and Consent: Contradictions in App Privacy Policies**  
 E. Okoyomon, N. Samarin, P. Wijesekera, A. On, N. Vallina-Rodriguez, I. Reyes, A. Feal, S. Egelman  
 IEEE Workshop on Technology and Consumer Protection (Co-located with IEEE S&P'19), 2019 [Acceptance Rate: -%]
36. **Do You Get What You Pay For? Comparing the Privacy Behaviors of Free vs. Paid Apps**  
 C. Han, I. Reyes, A. On, J. Reardon, A. Feal, S. Egelman, N. Vallina-Rodriguez  
 IEEE Workshop on Technology and Consumer Protection (Co-located with IEEE S&P'19), 2019 [Acceptance Rate: -%]
37. **DNS Privacy not so private: the traffic analysis perspective**  
 S. Deepthy, M. Juarez, N. Vallina-Rodriguez, and C. Troncoso  
 11th Workshop on Hot Topics in Privacy Enhancing Technologies (HotPETs 2018), 2018
38. **Studying TLS Usage in Android Apps (Submitted talk)**  
 A. Razaghpanah, A. Niaki, N. Vallina-Rodriguez, S. Sundaresan, J. Amann, and P. Gill  
 ACM, IRTF and ISOC Applied Networking Research Workshop (ANRW), 2018  
 [Acceptance Rate: 26.1%]
39. **AdTag: A Platform for Targeted Network Measurements from the Edge of the Network**  
 P. Callejo, C. Kelton, N. Vallina-Rodriguez, R. Cuevas, O. Gasser, C. Kreibich, F. Wohlfart, and A. Cuevas  
 ACM HotNets, 2017 [Acceptance Rate: 23.3%]
40. **"Is Our Children's Apps Learning?" Automatically Detecting COPPA Violations**  
 I. Reyes, P. Wiesekera, A. Razaghpanah, J. Reardon, N. Vallina-Rodriguez, S. Egelman, and C. Kreibich  
 IEEE Workshop on Technology and Consumer Protection (Co-located with IEEE S&P'17), 2017
41. **Tracking the Trackers: Towards Understanding the Mobile Advertising and Tracking Ecosystem**

- N. Vallina-Rodriguez, S. Sundaresan, A. Razaghpanah, R. Nithyanand, M. Allman, C. Kreibich, P. Gill  
Data Algorithmics and Transparency Workshop (DAT), 2016 [Acceptance Rate: 55.0%]
42. **Ad-Blocking and Counter Blocking: A Slice of the Arms Race**  
R. Nithyanand, S. Khattak, M. Javed, N. Vallina-Rodriguez, M. Falahrastegar, J. E. Powles, E. De Cristofaro, H. Haddadi, S. J Murdoch  
Usenix FOCI, 2016 [Acceptance Rate: 35.0%]
43. **Header Enrichment or ISP Enrichment? Emerging Privacy Threats in Mobile Networks**  
N. Vallina-Rodriguez, S. Sundaresan, C. Kreibich, and V. Paxson  
ACM HotMiddlebox, 2015 [Acceptance Rate: 37.5%]  
**Best-paper Award**
44. **When David can Help Goliath: The Case for Cellular Augmentation of Wired Networks**  
N. Vallina-Rodriguez, V. Erramilli, Y. Grunenberger, L. Gyarmati, N. Laoutaris, R. Stanojevic, and K. Papagiannaki  
ACM HotNets, 2012 [Acceptance Rate: 19.0%]
45. **Enabling Opportunistic Resources Sharing on Mobile Operating Systems: Benefits and Challenges**  
N. Vallina-Rodriguez, C. Efstratiou, G. Xie, and J. Crowcroft  
ACM S3, 2011
46. **ErdOS: Achieving Energy Savings in Mobile OS**  
N. Vallina-Rodriguez and J. Crowcroft  
ACM MobiArch, 2011 [Acceptance Rate: 50.0%]
47. **Exhausting Battery Statistics: Understanding the Energy Demands on Mobile Handsets**  
N. Vallina-Rodriguez, P. Hui, J. Crowcroft, and A. Rice  
ACM MobiHeld, 2010 [Acceptance Rate: 52.9%]
48. **Has Anyone Seen my Goose? Social Network Services in Developing Regions**  
N. Vallina-Rodriguez, P. Hui, and J. Crowcroft  
IEEE Social Mobile Web (SMW), 2009
- Conferences without proceedings 49. **Don't accept candies from strangers: An Analysis of third-party SDKs**  
A. Feal, J. Gamba, N. Vallina-Rodriguez, P. Wijesekera, J. Reardon, S. Egelman, J. Tapiador  
CPDP Conference, 2020
50. **"Won't Somebody Think of the Children" Privacy Analysis at Scale: A Case Study With COPPA**  
I. Reyes, P. Wijesekera, J. Reardon, A. Elazari, A. Razaghpanah, N. Rodriguez, and S. Egelman  
Privacy Law Scholars Conference (PLSC2018), May 2018, 2018
- Refereed national conferences 51. **This Is My Private Business! Privacy Risks on Adult Websites**  
P. Vallina, J. Gamba, A. Feal, N. Vallina-Rodriguez, and A. Fernandez-Anta  
Jornadas Nacionales de Investigacion en Ciberseguridad (JNIC), 2018  
[Acceptance Rate: 62.0%]
52. **An Analysis of Pre-installed Android Software**  
J Gamba, M Rashed, R Abbas, N Vallina-Rodriguez, and J Tapiador  
Jornadas Nacionales de Investigacion en Ciberseguridad (JNIC), 2018  
[Acceptance Rate: 62.0%]
- Demos and posters 53. **Do You Get What You Pay For? Comparing the Privacy Behaviors of Free vs. Paid Apps**  
C. Han, I. Reyes, A. Elazari Bar On, J. Reardon, A. Feal, K. A. Baberger, S. Egelman, and N. Vallina-Rodriguez  
Usenix SOUPS, 2019
54. **On The Ridiculousness of Notice and Consent: Contradictions in App Privacy Policies**  
E. Okoyomon, N. Samarin, P. Wijesekera, A. Elazari Bar On, N. Vallina-Rodriguez, I. Reyes, A. Feal, and S. Egelman  
Usenix SOUPS, 2019
55. **Examining COPPA Compliance at Scale**  
I. Reyes, P. Wijesekera, J. Reardon, A. Elazari, A. Razaghpanah, N. Vallina-Rodriguez, and S. Egelman  
Usenix SOUPS, 2018
56. **A Study on the Privacy Implications of Mobile Parental Control Apps**



- A. Feal, J. Gamba, N. Vallina-Rodríguez, C. Troncoso, A. Gorla, P. Calciati  
OPERANDI (PETS), 2018
57. **A Long Way to the Top: Significance, Structure, and Stability of Internet Top Lists**  
Q. Scheitle, O. Hohlfeld, J. Gamba, J. Jelten, T. Zimmermann, SD. Strowes, N. Vallina-Rodriguez  
TMA, 2018
58. **A Study on the Privacy Implications of Mobile Parental Control Apps**  
A. Feal, J. Gamba, N. Vallina-Rodríguez, C. Troncoso, A. Gorla, P. Calciati  
TMA, 2018
59. **Content Distribution Networks in the mobile age**  
F. Michelinakis, H. Doroud, A. Razaghpanah, A. Lutu, N. Vallina-Rodriguez, P. Gill, and J. Widmer  
ACM IMC, 2017
60. **Characterising users experience and critical path in mobile applications**  
A. Finamore, J. Newman, D. Perino, N. Rattनाविपानон, C. Soriente, and N. Vallina-Rodriguez  
ACM IMC, 2017
61. **Lumen: The No-Root Mobile Measurement App**  
A. Razaghpanah, N. Vallina-Rodriguez, S. Sundaresan, M. Allman, C. Kriebich, and P. Gill  
ACM Mobicom (Mobile app contest), 2017
62. **Lumen: Fine-Grained Visibility and Control of Mobile Traffic in User-Space**  
N. Vallina-Rodriguez, C. Kriebich, M. Allman, and V. Paxson  
NSF SaTC PI-meeting, 2017
63. **A client-side analysis of TLS usage in mobile apps**  
A Razaghpanah, N Vallina-Rodriguez, and P Gill  
Usenix Security, 2016
64. **Haystack: In situ Mobile Traffic Analysis in User Space**  
A Razaghpanah, N Vallina-Rodriguez, S. Sundaresan, C. Kriebich, P Gill, M. Allman and V. Paxson  
ACM HotMobile, 2016
65. **Signposts: End-to-End Networking in a World of Middleboxes**  
Richard Mortier, Andrius Aucinas, Amir Chaudhry, Jon Crowcroft, S Eide, Steve Hand, Anil Madhavapeddy, A Moore, Charalampos Rotsos, N Rodriguez  
ACM SIGCOMM, 2012
66. **ErdOS: An energy-aware social operating system for mobile handsets**  
N. Vallina-Rodriguez and J. Crowcroft  
OSDI, 2010
67. **Goose: social network services for developing regions and rural areas**  
N. Vallina-Rodriguez, P.Hui, and J. Crowcroft  
ACM SIGCOMM, 2009
- Magazine articles 68. **50 Ways to Leak Your Data An Exploration of Apps' Circumvention**  
J. Reardon, A. Feal, P. Wijesekera, A. Elazari Bar On, N. Vallina-Rodriguez, S. Egelman  
;login: The USENIX Magazine. Winter 2019, Vol. 44, No. 4, 2019
69. **7 in 10 smartphone apps share your data with third-party services**  
N. Vallina-Rodriguez, and S. Sundaresan  
Communications of ACM, 2017
70. **The Adblocking Tug-of-War**  
H. Haddadi, R. Nithyanand, S. Khattak, M. Javed, N. Vallina-Rodriguez, M. Falahrastegar, J. E. Powles, E. De Cristofaro, S. J Murdoch  
;login: The USENIX Magazine. Winter 2016, Vol. 41, No. 4, 2016
- Tech reports 71. **Haystack: In situ Mobile Traffic Analysis in User Space**  
A. Razaghpanah, N. Vallina, S. Sundaresan, C. Kriebich, P. Gill, M. Allman, and V. Paxson  
Arxiv, 2015
- PhD Thesis 72. **Cross-layer analysis of energy and spectrum waste of mobile applications**  
N. Vallina-Rodriguez  
University of Cambridge, 2013

## Keynotes, panels, plenary sessions, and seminars

Round tables and panels	2020	<b>CPDP</b> The GDPR is easy: (Un)tangling SME compliance hurdles	Brussels (BE)
	2019	<b>South Summit</b> Data protection as a driver for innovation	Madrid (ES)
		<b>Menendez Pelayo International University (UIMP)</b> Tecnologías de seguimiento, perfilado y protección de datos	Santander (ES)
Keynotes	2020	<b>T3chF3st</b> Post-poned due to the COVID-19 Pandemic	Madrid (ES)
	2017	<b>IEEE TMA Conference</b> Crowdsourcing Network and Traffic Measurements to Illuminate the Mobile Ecosystem	Maynooth (EI)
Plenary	2019	<b>European Data Protection Board (EDPB)</b> An Analysis of Pre-installed Android Software	Brussels (BE)
	2017	<b>Federal Trade Commission (FTC) PrivacyCon</b> Understanding the Mobile Ecosystem with the Lumen Privacy Monitor	Washington DC (USA)
	2015	<b>APNIC 39 / APRICOT</b> Real Mobile/Wireless Broadband: Trailblazing into the future	Fukuoka (JP)
	2014	<b>NANOG 62</b> Understanding User Experience on Mobile Devices with the ICSI Netalyzr	Baltimore (USA)
Divulagation	2019	<b>European Researcher's Night (MSCA)</b> IMDEA-CSI	Madrid (ES)
	2017	<b>European Researcher's Night (MSCA)</b> IMDEA-CSI	Madrid (ES)
Talks / seminars		University of British Columbia (Canada), Universidad del Desarrollo (Chile), Universidad de Chile (Chile), INRIA (France), Technicolor (France), VMWare (France), TU Munich (Germany), Bell Labs (Ireland), Trinity College Dublin (Ireland), University of Pisa (Italy), Institute for Information Law, University of Amsterdam (Netherlands), IMDEA Networks (Spain), IMDEA Software (Spain), Universidad Carlos III Madrid (Spain), Universidad Rey Juan Carlos (Spain), INCIBE (Spain), Telefonica Alpha (Spain), Telefonica Research (Spain), ETH Zurich (Switzerland), Microsoft Research (UK), University College London (UK), Queen Mary University of London (UK), Next Generation Networking Workshop (UK), the USA Federal Communications Commission (USA), Google (USA), Brave (USA), Data Transparency Lab (USA and Spain), Facebook (USA), CAIDA / UCSD (USA), UC Berkeley (USA), University of Maryland (USA), New York University (USA), Northeastern University (USA), Qualcomm (USA), AdRoll (USA), Uber (USA), Akamai (USA), Google (USA), and NEC Labs America (USA).	
Other		My colleagues have also presented joint work at RIPE Plenaries (Philipp Richter at <b>RIPE 73</b> , and Patricia Callejo at <b>RIPE 76</b> ), IETF meetings (Sandra Siby, <b>IETF 105</b> , <b>DEF CON 26</b> (Irwin Reyes, Crypto and Privacy Village), <b>Realworld Crypto</b> (Johanna Amman, 2020), at the <b>FTC PrivacyCon</b> (Jingjing Ren, Irwin Reyes, Primal Wijesekera), <b>USENIX Enigma</b> (Serge Egelman), <b>OWASP Meetup Jan 2020 (South Bay)</b> (Serge Egelman).	

## Mentoring and student supervision

Graduated PhD students	09/2015 - 10/2019	Abbas Razaghpanah	Stony Brook University †
Postdocs	04/2019 - Present	Marius Paraschiv	IMDEA Networks
PhD students	03/2018 - Present	Alvaro Feal	IMDEA Networks
	09/2017 - Present	Julien Gamba	IMDEA Networks
PhD interns	10/2019 - 12/2019	Kaspar David Hageman (Aalborg University)	IMDEA Networks
	02/2019 - 04/2019	Antonio Montieri (University of Napoli)	IMDEA Networks
	09/2018 - 08/2019	William Tolley (University of New Mexico)	ICSI ‡
	06/2018 - 09/2018	Shehroze Farooqi (University of Iowa)	ICSI
	06/2018 - 09/2018	Muhammad Ahmad Bashir (NEU)	ICSI
	06/2017 - 09/2017	Mohammed Taha Khan (UIC)	ICSI ‡
	06/2017 - 09/2017	James Newman (Northwestern University)	ICSI
	06/2017 - 09/2017	Abbas Razaghpanah (SBU)	ICSI

	02/2017 - 06/2017 06/2015 - 09/2015	Hossein Doroud (UC3M) Abbas Razaghpanah (SBU)	IMDEA Networks ICSI
MSc students	2010 - 2011	Rokey Ge	University of Cambridge
BsC students	2012 - 2013 2011 - 2012 2010 - 2011 2010 - 2011	Amy O'Sullivan Jay Shah Mark Hogan Michael Clark	University of Cambridge University of Cambridge University of Cambridge University of Cambridge
Pre-doc interns	02/2019 - 05/2019 05/2018 - 06/2018 12/2016 - 06/2017	Alberto Martin (UPM) Joel Rodiel Lucero (San Diego HighTech) Ronald Arnanjaya (UC Berkeley)	IMDEA Networks IMDEA Networks ICSI

† Co-supervised with Prof. Phillipa Gill (UMass-Amherst)

‡ Funded by an Open Technology Fund (OTF) Fellowship

## Teaching

2019-2020	<b>MSc in Cybersecurity</b> Guest lecturer: Mobile Applications, Trackers and Privacy (1.5h)	UC3M (ES)
	<b>MSc Telematics</b> Guest lecturer: Internet Measurements (1.5h)	UC3M (ES)
	<b>PhD School</b> Guest lecturer: Internet Measurements (15h)	UC3M (ES)
2018-2019	<b>5th Interdisciplinary Summerschool on Privacy (ISP 2019)</b> Have I given consent to this? Analyzing the transparency of Mobile products (2h)	Nijmegen (NL)
	<b>TMA PhD School</b> Studying Mobile Traffic with the Lumen Traffic Monitor	Paris (FR)
	<b>MSc in Cybersecurity</b> Guest lecturer: Towards Building a Complete Picture of the Privacy Risks in Android (1.5h)	UC3M (ES)
	<b>MSc in Telematics Engineering</b> Guest lecturer: Measuring mobile traffic (1.5h)	UC3M (ES)
2017-2018	<b>MSc in Telematics Engineering</b> Guest lecturer: Crowdsourcing mobile measurements (1.5h)	UC3M (ES)
2016-2017	<b>MSc in Telematics Engineering</b> Guest lecturer: Crowdsourcing mobile measurements (1.5h)	UC3M (ES)
2011-2012	<b>BsC in Computer Science</b> Student supervisor: Principles of Communications (Lecturer: Prof. Jon Crowcroft)	University of Cambridge (UK)
2010-2011	<b>BsC in Computer Science</b> Student supervisor: Principles of Communications (Lecturer: Prof. Jon Crowcroft)	University of Cambridge (UK)
2009-2010	<b>BsC in Computer Science</b> Student supervisor: Advanced Systems Topics (Lecturer: Prof. Steve Hand)	University of Cambridge (UK)
2009-2010	<b>BsC in Computer Science</b> Student supervisor: Digital Communications II (Lecturer: Prof. Jon Crowcroft)	University of Cambridge (UK)

## Software

I have been actively involved in the development of publicly available software for enhancing mobile transparency, network analysis and network troubleshooting.

1. **AppCensus**  
<https://appcensus.mobi>
2. **App Versions Tool**  
<https://recon.meddle.mobi/appversions/index.html>
3. **FirmwareScanner (10,000 users)**  
<https://play.google.com/store/apps/details?id=org.imdea.networks.iag.preinstalleduploader>
4. **Lumen Privacy Monitor (21,000 users)**

<https://play.google.com/store/apps/details?id=edu.berkeley.icsi.haystack>

5. **Netalyzr for Android (80,000 users) (Discontinued)**

<https://play.google.com/store/apps/details?id=edu.berkeley.icsi.netalyzr.android>

## Public datasets

1. **Android Observatory**  
<https://www.androidobservatory.com>
2. **Domain Ranks**  
<https://toplists.github.io>
3. **TLS Client Fingerprints**  
[https://github.com/platonK/tls\\_fingerprints](https://github.com/platonK/tls_fingerprints)
4. **CloudMap (dataset and code)**  
<http://wireless.networks.imdea.org/cloudmap-project>
5. **TLS handshake fingerprints for more than 30K Android apps**  
<https://haystack.mobi/datasets.html>
6. **Research data supporting “Adblocking and Counter-Blocking: A Slice of the Arms Race”**  
<https://www.repository.cam.ac.uk/handle/1810/256770>
7. **HTTP Header injection in mobile networks (via CRAWDDAD)**  
<https://crawdad.org/icsi/netalyzr-android/20150324/>
8. **Netalyzr dataset (via DHS IMPACT)**  
[https://impactcybertrust.org/dataset\\_view?idDataset=465](https://impactcybertrust.org/dataset_view?idDataset=465)

## Selected media coverage

<b>Side-channels in Android apps</b>	<b>El Pais</b> , 08/2019	Como saber cuando una “app” accede a la ubicacion, la camara o el microfono del movil
	<b>CNET</b> , 07/2019	More than 1,000 Android apps harvest data even after you deny permissions
	<b>Independent</b> , 07/2019	Hundreds of Android apps steal your data even if you deny permission, study reveals
	<b>The Verge</b> , 07/2019	Thousands of Android apps can track your phone — even if you deny permissions
	<b>Business Insider (Spain)</b> , 07/2019	Más de 1.300 apps te siguen espiondo el movil aunque no les hayas dado permiso, y entre las implicadas están Samsung, Baidu o Disney
	<b>Fast Company</b> , 07/2019	These are the sneaky new ways that Android apps are tracking you
<b>Privacy risks of preinstalled Android software</b>	<b>The Register</b> , 05/2019	Eggheads confirm: Rampant Android bloatware a privacy and security hellscape
	<b>ABC (Spain)</b> , 04/2019	Software preinstalado en Android: la amenaza silenciosa que acecha al usuario
	<b>El Pais</b> , 04/2019	Google y los fabricantes no aclaran la vigilancia oculta en los moviles Android
	<b>Le Figaro</b> , 04/2019	La collecte cachée des applications préinstallées sur Android
	<b>TechCrunch</b> , 03/2019	Android users’ security and privacy at risk from shadowy ecosystem of pre-installed software, study warns
	<b>The Times (UK)</b> , 03/2019	Android apps gather user data without permission
	<b>La Vanguardia</b> , 03/2019	Android permite a empresas acceso indebido a datos personales
	<b>ZDNet</b> , 03/2019	Android ecosystem of pre-installed apps is a privacy and security mess
	<b>RTVE (TV) - Nightly news</b> , 03/2019	Telediario 9 pm
	<b>RNE (Radio) - Todo Noticias</b> , 03/2019	Aplicaciones móviles que nos espían
	<b>Cadena COPE (Radio) - Herrera en COPE</b> , 03/2019	¿Sabes cómo tu móvil Android te espía? ( <b>Life interview</b> )
<b>TV3 (TV) - News</b> , 03/2019	Ens espein a traves del mobil?	
<b>TV3 (TV) - Els Matins</b> , 03/2019	Mòbils espies: la privacitat en risc ( <b>Life Interview</b> )	
<b>El Pais</b> , 03/2019	Como le vigilan los móviles Android sin que lo sepa	
<b>El Pais (English)</b> , 03/2019	I spy: How Android phones keep tabs on our every move	
<b>Reuters</b> , 03/2019	Study Shows Limited Control Over Privacy Breaches by Pre-Installed Android Apps	
<b>Privacy Risks on Children Android Apps</b>	<b>NBC News</b> , 12/2018	Google hit with FTC complaint over ‘inappropriate’ kids apps
	<b>NBC (TV) - Nightly News</b> , 05/2018	Thousands of Android apps improperly tracking kids’ data, new study shows

	<b>The Guardian</b> , 05/2018	Thousands of Android apps potentially violate child protection law
	<b>Washington Post</b> , 05/2018	Thousands of apps in Google Play Store may be illegally tracking children, study finds
	<b>FOX News (TV)</b> , 05/2018	Thousands of Android apps may improperly track kids' activities
	<b>New York Post</b> , 05/2018	A slew of apps are creepily spying on our kids
	<b>US Today</b> , 05/2018	Thousands of Android apps improperly track children, study finds
	<b>The Globe and Mail</b> , 05/2018	Thousands of Android apps improperly tracking kids' data, new study shows
	<b>El Pais</b> , 05/2018	Privacy on the net: Children's apps are privacy risk for minors
	<b>Fortune</b> , 05/2018	Google Responds to Study Claiming a Majority of Children's Android Apps Potentially Track Kids
	<b>Engadget</b> , 05/2018	Study finds over 3,300 Android apps improperly tracking kids
	<b>CNET</b> , 05/2018	Thousands of Android apps are tracking children, study finds
	<b>The Verge</b> , 05/2018	Report finds more than half of Android apps for children are in violation of COPPA
	<b>The Inquirer</b> , 05/2018	Thousands of Android apps may be collecting children's data illegally
	<b>Android Authority</b> , 05/2018	Many child-oriented apps potentially violate US' child privacy law
	<b>Nextgov</b> , 05/2018	Thousands of Apps Improperly Tracking Kids, Study Finds
	<b>Boston Globe</b> , 03/2018	Facebook is just the tip of the iceberg. Thousands of apps can take your data
	<b>RTVE (TV) - Telediario</b> , 12/2017	Privacy on the net: Children's apps are privacy risk for minors
	<b>El Periodico</b> , 12/2017	"Apps" infantiles roban datos personales de menores
<b>Security and privacy issues on commercial VPN services</b>	<b>NPR</b> , 08/2017	Turning To VPNs For Online Privacy? You Might Be Putting Your Data At Risk
	<b>Wired</b> , 02/2017	Beware: Most Mobile VPNs Aren't as Safe as They Seem
	<b>Wired (UK)</b> , 01/2017	Android VPN app developers are using malware to track your data
	<b>ArsTechnica</b> , 01/2017	Majority of Android VPNs can't be trusted to make users more secure
	<b>The Verge</b> , 01/2017	Most free Android VPNs leak data and many don't even use encryption, says study
	<b>ABC (Australia)</b> , 01/2017	Viruses, spyware found in "alarming" number of Android VPN apps
	<b>Android Authority</b> , 01/2017	Researchers warn of vast problems with Android VPN apps
	<b>ZDNet</b> , 01/2017	VPNs are not as private as the name suggests
<b>Web and mobile tracking</b>	<b>El Pais</b> , 04/2020	El peligro de las apps: la Generalitat emplea una empresa de marketing en su aplicacion contra el coronavirus
	<b>DigitalTrends</b> , 03/2020	The secret way most apps spy on you even when you think they aren't
<b>Web and mobile tracking</b>	<b>El Pais</b> , 07/2019	Quién sabe que miras porno "online"
	<b>El Pais</b> , 07/2019	La mejor lección de la polémica de FaceApp
	<b>Financial Times</b> , 10/2018	How smartphone apps track users and share data
	<b>BuzzFeed</b> , 10/2018	A Lot Of Apps Sell Your Data. Here's What You Can Do About It
	<b>FastCompany</b> , 05/2017	Smartphone apps are tracking you and here's how to know what they know
<b>Ad-blocking</b>	<b>Heise</b> , 05/2016	Pagefair: Mobile Adblocker verbreiten sich rasant
<b>Personal interviews</b>	<b>El Pais</b> , 10/2019	Fuera WhatsApp y pegatinas en las camaras: qué tienen los expertos en privacidad en sus "smartphones"
	<b>El Comercio</b> , 12/2017	Mucha gente usa la tecnología sin saber lo que hay detrás y los datos que envía

## Societal, regulatory and industry impact

2020	<b>Privacy International (PI)</b>	Privacy International (PI) has launched an international campaign to demand Google measures to enforce control over pre-installed Android software citing our paper.
2019	<b>AEPD/EDPB</b>	The AEPD (the Spanish Data Protection Agency) issued a press release to disseminate our analysis on the privacy-risks of pre-installed apps. We were later invited to present our work at the EDPB meeting in July 2019. <a href="https://www.aepd.es/prensa/2019-03-18.html">https://www.aepd.es/prensa/2019-03-18.html</a>
	<b>Google</b>	We reported to Google our findings regarding side-channels and covert-channels being used by Android apps in the wild to obtain user's location and unique identifiers without consent (USENIX Security'19 paper). Google modified the Android permission model in Android 10 to eliminate these vulnerabilities. We have been rewarded with a bug bounty in exchange.

		<a href="https://developer.android.com/about/versions/10/privacy">https://developer.android.com/about/versions/10/privacy</a>
	<b>Mozilla's State of the Internet Report</b>	Mozilla's "State of the Internet Report" featured our analysis of the privacy risks of pre-installed apps <a href="https://www.transcript-publishing.com/media/pdf/1a/ce/ac/oa9783839449462.pdf">https://www.transcript-publishing.com/media/pdf/1a/ce/ac/oa9783839449462.pdf</a>
2018	<b>Legal Actions</b>	Multiple class action lawsuits against the developers of children's apps potentially violating the COPPA rule are using our paper's data, and cite it in their complaints. For example: <a href="https://www.theverge.com/2017/8/9/16115352/disney-sued-spying-children-gaming-apps-disney-princess-palace-pets">https://www.theverge.com/2017/8/9/16115352/disney-sued-spying-children-gaming-apps-disney-princess-palace-pets</a> . Based on the above litigation, several large privacy-invasive SDK developers have agreed to injunctive relief under which they are now required to proactively ensure that their SDKs are either not used in children's apps or correctly configured to disable behavioral tracking. (The details will be publicly announced in the coming months.) <b>CASE: State of New Mexico Ex. Rel. Hector Balderas, Attorney General, The State, vs. Tiny Lab Productions, Twitter Inc., Mopub, Google, Inc., Admob Inc., Aerserv LLC, Inmobi Pte Ltd., Applovin Corporation, and IronSource USA, Inc.</b> <a href="https://www.manatt.com/Manatt/media/Media/PDF/Newsletters/Advertising%20Law/New-Mexico-v-Tiny-Lab-Productions.pdf">https://www.manatt.com/Manatt/media/Media/PDF/Newsletters/Advertising%20Law/New-Mexico-v-Tiny-Lab-Productions.pdf</a>
	<b>Google / Apple</b>	In response to our COPPA study, Google announced new Play Store policies for app developers with regard to children's privacy: <a href="https://android-developers.googleblog.com/2019/05/building-safer-google-play-for-kids.html">https://android-developers.googleblog.com/2019/05/building-safer-google-play-for-kids.html</a> This prompted Apple to one-up Google, by creating even more stringent privacy policies for app developers: <a href="https://developer.apple.com/news/?id=06032019j">https://developer.apple.com/news/?id=06032019j</a>
	<b>Facebook</b>	Facebook received a copy of the results from the COPPA paper and used it to cut off API access to app developers using the Facebook SDK in child-directed apps, rewarding us with a bug bounty.
	<b>US Senate and FTC</b>	Three US senators asked the FTC to open an investigation about Google's lack of control over children applications published in Google Play. This prompted the FTC to revisit its COPPA rulemaking authority ahead of schedule, which will result in updates to the associated regulations. <a href="https://www.ftc.gov/news-events/press-releases/2019/07/ftc-seeks-comments-childrens-online-privacy-protection-act-rule">https://www.ftc.gov/news-events/press-releases/2019/07/ftc-seeks-comments-childrens-online-privacy-protection-act-rule</a> <a href="https://www.markey.senate.gov/imo/media/doc/FTC%20Google%20Play%20Store.pdf">https://www.markey.senate.gov/imo/media/doc/FTC%20Google%20Play%20Store.pdf</a> <a href="https://www.tomudall.senate.gov/imo/media/doc/Google%20Letter%20COPPA%209.25.18.pdf">https://www.tomudall.senate.gov/imo/media/doc/Google%20Letter%20COPPA%209.25.18.pdf</a>
2017	<b>Europol</b>	Europol cited our IMC'16 paper about CGN deployments in a blogpost discussing the difficulties to attribute criminal evidence due to CGNs in a press release: " <i>Closing the online crime attribution crime: European Law Enforcement Takes Carrier-Grade NAT (CGN)</i> "
	<b>CDT</b>	The Center for Democracy and Technology (CDT) has leveraged our IMC'16 paper on Android VPN apps to request that the Federal Trade Commission investigates HotspotShield, one of the offending apps found in our analysis. <a href="https://www.cnet.com/news/hotspot-shield-vpn-privacy-accusation">https://www.cnet.com/news/hotspot-shield-vpn-privacy-accusation</a> <a href="https://www.documentcloud.org/documents/3914264-FTC-complaint-about-Hotspot-Shield.html">https://www.documentcloud.org/documents/3914264-FTC-complaint-about-Hotspot-Shield.html</a>