

José González Cabañas

Postdoctoral Researcher and Teaching Assistant - UC3M-Santander Big Data Institute, Spain

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PROFESSIONAL EXPERIENCE

Postdoctoral Researcher and Teaching Assistant

Nowadays - October 2021

UC3M-Santander Big Data Institute, Spain

Ph.D. Researcher and Teaching Assistant

October 2021 - October 2017

Universidad Carlos III de Madrid, Spain

Research Intern

September 2017 - September 2015

Universidad Carlos III de Madrid, Spain

EDUCATION

Ph.D. in Telematic Engineering

October 2021 - September 2017

Universidad Carlos III de Madrid, Spain

- FPU fellowship from the Spanish Ministry of Education
- Cum Laude Ph.D. Thesis: “Design, analysis, and implementation of advanced methodologies to measure the socio-economic impact of personal data in large online services”

MSc. in Telematics Engineering

July 2017 - September 2016

Universidad Carlos III de Madrid, Spain

Bsc. in Telecommunications Engineering

July 2016 - September 2012

Universidad Carlos III de Madrid, Spain

- Best academic record: 8.94/10
- Excellence performance awards by the Community of Madrid and UC3M
- Best BSc. Thesis in Spain, category “Bachelor in Communications Systems Engineering”, by COITT
- BSc. Thesis: FDVT: Data Valuation Tool for Facebook Users

PARTICIPATION IN RESEARCH PROJECTS

Análisis periódico de la estabilidad y discriminación de los modelos con el paso del tiempo

December 2022 - April 2022

Funded by Banco Santander

PUBLICATIONS

CarbonTag: A browser-based method for approximating energy consumption of online ads

J. González-Cabañas, P. Callejo, R. Cuevas, S. Svatberg, T. Torjesen, Á. Cuevas, A. Pastor, M. Kotila
IEEE Transactions on Sustainable Computing, 2023 JCR Q2

Estimating ideology and polarization in European countries using Facebook data

F. Caravaca, J. González-Cabañas, Á. Cuevas, R. Cuevas.
EPJ Data Science 11 (1), 56, 2022 JCR Q1

Unique on Facebook: Formulation and Evidence of (Nano)targeting Individual Users with non-PII Data

J. González-Cabañas, Á. Cuevas, R. Cuevas, J. López Fernández, D. García.
Proceedings of the ACM Internet Measurement Conference (IMC '21), 2021 CORE A

How resilient is the Open Web to the COVID-19 pandemic?

J. González-Cabañas, P. Callejo, P. Vallina, Á. Cuevas, R. Cuevas, A. Fernández-Anta
Telematics and Informatics 2021, 64, 101692 JCR Q1

Digital Contact Tracing: Large-scale Geolocation Data as an Alternative to Bluetooth-based Apps' Failure

J. González-Cabañas, Á. Cuevas, R. Cuevas, M. Maier
Special Issue "Information and Communications Technologies (ICT) to deal with COVID-19"
Electronics 2021, 10 (9), 1093 JCR Q3

Does Facebook Use Sensitive Data for Advertising Purposes?

J. González-Cabañas, Á. Cuevas, A. Arrate, R. Cuevas
**Cover* at the Communications of the ACM* 2021, 64 (1), 62-69 JCR Q1

Malvertising in Facebook: Analysis, Quantification and Solution

A. Arrate, J. González-Cabañas, Á. Cuevas, R. Cuevas
Electronics 2020, 9 (8), 1332 JCR Q3

Large-scale analysis of user exposure to online advertising on Facebook

A. Arrate, J. González-Cabañas, Á. Cuevas, R. Cuevas, M. Calderón
IEEE Access 2019, 7, 11959-11971 JCR Q1

Unveiling and Quantifying Facebook Exploitation of Sensitive Personal Data for Advertising Purposes

J. González-Cabañas, Á. Cuevas, R. Cuevas
Proceedings of the 27th USENIX Security Symposium 2018 CORE A+

Sustainability in Advertising Lab

November 2022 - November 2021

Funded by CAVAI AS, Noruega

Integración de sistema de publicidad en Azzulei Technologies

October 2022 - June 2022

Funded by Azzulei Technologies

Estandarización y normalización de las colecciones de usuario de las plataformas Becas Santander y Santander X

August 2022 - November 2020

Funded by Banco Santander

Zero Knowledge Insights & Advertising

April 2022 - April 2021

Funded by Profila GMBH

Aplicaciones económicas de distancias culturales generadas con información proveniente de las redes sociales

January 2022 - April 2019

Funded by Fundación BBVA

Análisis y optimización de la malla batch de Santander España (Fase 2)

December 2021 - May 2021

Funded by Banco Santander

SMOOTH: GDPR Compliance Cloud Platform for Micro Enterprises

October 2020 - May 2018

Funded by el programa EU H2020

TYPES: Towards Transparency and Privacy in the Online Advertising Business

October 2017 - May 2015

Funded by el programa EU H2020

MEDIA OUTREACH

Facebook removes the use of potentially sensitive interests on its online advertising platform:

- <https://www.facebook.com/business/news/removing-certain-ad-targeting-options-and-expanding-our-ad-controls>

TechCrunch, El País, El Confidencial, and UC3M talk about the work Nanotargeting Facebook users with non-PII

- <https://techcrunch.com/2021/10/15/researchers-show-facebooks-ad-tools-can-target-a-single-user/>
- <https://elpais.com/tecnologia/2021-10-20/como-poner-un-anuncio-a-una-sola-persona-en-facebook-de-entre-sus-cientos-de-millones-de-usuarios.html>
- https://www.elconfidencial.com/tecnologia/ciencia/2021-10-24/facebook-identificar-manipular-anuncios_3311563/
- https://www.uc3m.es/ss/Satellite/UC3MInstitucional/es/Detalle/Comunicacion_C/1371321706060/1371215537949/La_publicidad_en_Facebook_puede_dirigirse_a_una_unica_persona

FDVT: Data Valuation Tool for Facebook Users

J. González-Cabañas, Á. Cuevas, R. Cuevas
Proceedings of the CHI Conference on Human Factors in Computing Systems 2017 CORE A+

The value of online users: Empirical evaluation of the price of personalized ads

M. Marciel, J. González-Cabañas, Y. M. Kassa, R. González, M. Ahmed
11th International Conference on Availability, Reliability and Security (ARES) 2016

Your Data in the Eyes of the Beholders: Design of a Unified Data Valuation Portal to Estimate Value of Personal Information from Market Perspective

Y. M. Kassa, J. González-Cabañas, Á. Cuevas, R. Cuevas, M. Marciel, R. González
11th International Conference on Availability, Reliability and Security (ARES) 2016

CHAPTERS IN BOOKS

Marketing Digital y Big Data

J. González-Cabañas, Á. Cuevas, R. Cuevas
FUNCAS 2022 - 978-84-17609-62-7. Págs 105-120

AWARDS

Accésit premio Emilio Aced en protección de datos personales

December 2022

Madrid, Spain - Awarded by the Spanish DPA (AEPD)

Premio Talento y Tecnología 2022

October 2022

Madrid, Spain - to the best Doctoral Thesis on Ethical and Legal Aspects in the Field of Technology, awarded by the Madrid City Council

Runner-up paper at ACM IMC

November 2021

USA - The publication *Unique on Facebook: Formulation and Evidence of (Nano)targeting Individual Users with non-PII data* selected as one of the runner-up papers for the Best Paper Award

COVER at CACM

January 2021

USA - The publication *Does Facebook Use Sensitive Data for Advertising?* is the cover of the Communications of the ACM magazine volume 1 of January 2021

Emilio ACED Personal Data research award

January 2019

Madrid, Spain - Awarded by the Spanish DPA (AEPD)

FPU Fellowship

October 2017

Spain - Awarded by the Ministry of Education, Spain

Premio Liberalización de las Telecomunicaciones

November 2016 - Spain

Madrid, Spain - Best BSc. Thesis in Spain: Telecommunications Systems Engineering field, awarded by the COITT/AEGITT, Spain

NewsScientist and El País cover the work about the sensitive personal data use for Facebook advertising purposes worldwide

- <https://www.newscientist.com/article/2214309-facebookad-data-may-put-millions-of-gay-people-at-risk/>
- https://elpais.com/tecnologia/2019/07/30/actualidad/1564440752_423510.html

El País newspaper mentions our research where we provide data from the Spanish political parties on Facebook, prior to the Spain 2019 elections

- https://elpais.com/tecnologia/2019/11/06/actualidad/1573061624_784699.html
- https://elpais.com/tecnologia/2019/04/25/actualidad/1556211762_523683.html

The FDVT browser extension is highlighted on Antena 3 TV news

- https://www.it.uc3m.es/jqcabana/videos/FDVT_A3_Noticias.MP4

Financial Times, The Times, Le Figaro and NewsScientist cover our work about the Facebook use of sensitive personal data in the European Union

- <https://www.ft.com/content/11ed3f18-172b-11e8-9e9c-25c814761640>
- <https://www.thetimes.co.uk/article/facebook-in-eu-datadilemma-krrk2f333>
- <https://www.lefigaro.fr/secteur/high-tech/2018/03/05/32001-20180305ARTFIG00100-sur-facebook-65-des-francais-cibles-sur-leur-orientation-sexuelle-politique-ou-religieuse.php>
- <https://www.newscientist.com/article/2161442-facebookmay-guess-millions-of-peoples-sexuality-to-sell-ads/>

The FDVT browser extension and my research appeared on more than 100 media outlets: *Financial Times*, *The Times*, *Le Figaro*, *NewsScientist*, *El País*, *Antena 3 TV*, *La Sexta TV*, *Cadena Cope radio*, *RTVE*, etc.

COMPLEMENTARY FORMATION

Volunteering in Kenya

August 2016 - July 2016

NGO PROYDE

- Participation in International Volunteer Project

BEST Course: Designing Human-Centered Pervasive Systems (App Wars: the Attack of the UbiComps)

July 2014

Patras University, Greece

TEACHING

Universidad Carlos III de Madrid, Spain

Web Analytics

2023 - 2024

BSc in Data Science Engineering, 4th course, Group 96

2022 - 2023

BSc in Data Science Engineering, 4th course, Group 96

Intermediate knowledge of Spreadsheets

2022 - 2023

BSc in Law, 2nd course, Group 13

Advanced knowledge of Spreadsheets

2021 - 2022

BSc in Industrial Technologies Engineering, 2nd course, Group 725

Switching

2021 - 2022

BSc in Telematics Engineering, 3rd course, Group 71

BSc in Mobile and Space Communications Engineering, 3rd course, Group 61

2020 - 2021

BSc in Telecommunication Technologies Engineering, 3rd course, Group 91

BSc in Telematics Engineering, 3rd course, Groups 71, 72

BSc in Mobile and Space Communications Engineering, 3rd course, Group 61

2019 - 2020

BSc in Telecommunication Technologies Engineering, 3rd course, Groups 91, 95

BSc in Telematics Engineering, 3rd course, Group 71

BSc in Mobile and Space Communications Engineering, 3rd course, Group 61

3rd prize DTL 2016 Hackathon

November 2016

Columbia University, New York - Awarded by Data Transparency Lab, Telefónica

Best academic performance record

November 2016

Getafe, Spain - BSc. in Communication System Engineering, awarded by UC3M

Grant to study MSc. in Telematics Engineering

September 2016

Leganés, Spain - Awarded by the Department of Telematic Engineering at UC3M

Students Excellence award

May 2015

Getafe, Spain - Awarded by Consejo Social at UC3M

Academic Excellence awards

2016 - 2012

Madrid, Spain - Academic years 2015/2016, 2014/2015, 2013/2014, and 2012/2013, awarded by the Community of Madrid, Spain

LANGUAGES

Spanish: native

English: C2 level EFSET

<https://www.efset.org/cert/NGVXaZ>

French: B2 DELF

DEVELOPED SOFTWARE

FDVT: Chrome and Mozilla browser extension.

Installed by more than 10k users

INVITED TALKS AND OTHER DISSEMINATION ACTIVITIES

Noche Europea de los Investigadores

September 30, 2022

Madrid, Spain

<https://www.nocheinvestigadoresmadrid.org/actividad/uc3m-sabes-que-puedo-identificarte-en-redes-sociales-entre-miles-de-millones-de-usuarios>

Databeers Madrid XXXIII

September 14, 2022

Madrid, Spain

<https://databeers.tumblr.com/>

Conectando Puntos Podcast

November 5, 2021

Episode 174, Spain

<https://conectandopuntos.es/episodio-174-programa-mando-vida-artificial/>

ACM IMC 2021 Technical Sessions

November 3, 2021

Online, USA

<https://youtu.be/ImVOKbyrpMk>

SoSySec Seminar

March 12, 2021

Online, INRIA, France

<https://videos-rennes.inria.fr/video/jBVJNKURV>

Communications of the ACM Dissemination

December 22, 2020

Online, USA

2018 - 2019

BSc in Telematics Engineering, 3rd course, Group 71
BSc in Communication System Engineering, 3rd course, Group 61

Computer Networks

2023 - 2024

BSc in Computer Science and Engineering, 3rd course, Groups 82, 84

2019 - 2020

BSc in Data Science and Engineering, 3rd course, Groups 96, 97

2018 - 2019

BSc in Computer Science and Engineering, 3rd course, Groups 81, 83, 89

2016 - 2017

BSc in Computer Science and Engineering, 3rd course, Groups 81, 83, 89

Access Networks and Shared Media

2016 - 2017

BSc in Telecommunication Technologies Engineering, 2nd course, Groups 91, 95

Engineering Program for International Students

2018 - 2019

Computer Networks. Directed Study

2016 - 2017

Computer Networks. Directed Study

SKILLS AND INTERESTS

Python, R, Javascript, HTML, SQL, MongoDB, ElasticSearch, AWS
Privacy, Online Advertising, Personal Data, Data Mining, Scraping, Internet
Measurements, Social Networks, Carbon emissions.

https://youtu.be/_zKvp3dy8R4

Usenix Security 2018 Technical Sessions

August 16, 2018

Baltimore, MD, USA

<https://youtu.be/wVx-uTw9iO8>

Databeers Madrid XXII

March 19, 2018

Madrid, Spain

Poniendo las Calles

November 30, 2016

Cadena Cope Radio, Spain

https://www.cope.es/programas/poniendo-las-calles/entrevistas-en-poniendo-las-calles/audios/mayor-fuenteingresos-facebook-20161130_4692

REVIEWER AT

SIGCHI 2024

Globecom SAC SN 2021, 2020, 2018

LCN 2020

IEEE ICC 2020 ISCC 2019

STUDENTS

BSc Thesis Advisor

July 2023 - Universidad Carlos III de Madrid

Sandra Gómez: BSc in Data Science and Engineering

July 2017 - Universidad Carlos III de Madrid

Rocío Gómez: BSc in Communication System Engineering, Co-advisor: Dr. Ángel Cuevas

Alejandro Moratilla: BSc in Computer Science and Engineering, Co-advisor: Dr. Ángel Cuevas