# JORGE CIMENTADA

#### CONTACT INFORMATION

Pompeu Fabra University

Socio-Demographics Research Group

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https://cimentadaj.github.io/

Google Scholar

Github: github/cimentadaj

#### PERSONAL

Citizenship: Dominican Republic, Spain

# EDUCATION

2015- Ph.D. Pompeu Fabra University, Political and Social Sciences

Fields: Sociology and Social inequalities

Dissertation: "Educational institutions and their effect on inequality: Three Papers on Educa-

tional Systems and Inequality of Achievement and Opportunity"

Advisors: Gøsta Esping-Andersen, Bruno Arpino

Awarded best PhD paper Prize (2017)

2014 M.Sc. Pompeu Fabra University, Research in Sociology and Demography

Advisors: Gøsta Esping-Andersen, Bruno Arpino

2009 B.A. PUCMM University, Business

### RESEARCH INTERESTS

Social/Geographical Mobility Computational Statistics Demography Social Inequalities

### **CURRENT POSITIONS**

2019- External collaborator (programming)

Red.es, Spanish Ministry of Economy

2018- Data Scientist

**Kernel Analytics** 

2018- Research affiliate & programmer

Research and Expertise Centre for Survey Methodology

Mentor: Wiebke Weber

#### **PUBLICATIONS**

# **Refereed Journal Articles**

2018 Esping-Andersen, G. & Cimentada, J. (2018). Ability and Mobility: The Relative Influence of

Skills and Social Origin on Social Mobility. Social Science Research, Volume 75, Pages 13-31.

[Replication files][Open access]

# **Submitted Articles**

2019 **Cimentada**, J. & Klüsener, S. (2019), Exploring the Demographic History of Populations with Enhanced Lexis Surfaces, submitted to *Demographic Research*. [Replication files] [Open access]

### WORK IN PROGRESS

**Cimentada**, J. (2018), Unequal Decentralization of Education: An Intervention of the AGE Program on Indigenous Populations in Mexico. In preparation for *Population and Development Review* [Replication files]

**Cimentada**, **J.** (2017), Does curricular tracking explain global SES gaps? an international comparison of the SES achievement gaps from 2000 to 2015. SocArXiv, 21 Sept. 2017. In preparation for *Research in Social Stratification and Mobility* [Replication files] [Open access]

**Cimentada**, **J.** & Weber, W. (In preparation), The sqpr package: a gateway for correcting for statistical measurement error.

**Cimentada, J.** (In preparation), A unified statistical ecosystem to analyze the European Social Survey: an R package.

### COMPUTATIONAL SKILLS

Statistics: R, Python, SPSS, Stata, Stan, Excel

**Programming:** Bash, Git, cron, Web Scraping, API interactions, ssh, Shiny applications, Emacs

Big data: Impala, Hadoop, Spark, Oracle, SQL, PostgreSQL, Airflow

Text processing: Regular Expressions, Tesseract, LTEX

### STATISTICAL SOFTWARE

#### Scientific and statistical software

opendataes: Interact with the datos.gob.es API [Github, Package website] sqpr: Access the SQP API and adjust statistical models for measurement error [Github] essurvey: Download data from the European Social Survey [CRAN, Package website] percealc: Estimate continuous distributions from categorical variables [CRAN, Github] coauthornetwork: Explore your network of coauthors from your Google Scholar profile [Github] cimentadaj: Personal package [Github]

### Contributions to other statistical software

corrr: Exploring correlations in a 'tidy' format. [Github]

broom: Convert statistical analysis objects into tidy format [Github]

scholar: Extract citation data from Google Scholar. [Github]

### Scientific web applications

Exploring the Demographic History of Populations with Enhanced Lexis Surfaces Educational Inequality Around the World

- Commissioned by the Research and Expertise Centre for Survey Methodology:
- \* Download Spanish translated data from the European Social Survey
- \* SQP: A a Tool for Correction for Measurement and Sampling Error (joint project with GESIS)

Open source Github ranking: R (http://git-awards.com/users/cimentadaj) 3 out of 126 in Madrid 13 out of 482 in Spain

#### HONORS, AWARDS, AND FELLOWSHIPS

Best conference presentation 'National Spanish R Conference', Department of Mathematics, University of Murcia (€200)

Pompeu Fabra EBES grant to "Bayesian Inference and Stan", Newcastle University (€600)

Best PhD paper Prize for the paper "Does curricular tracking explain SES gaps? An international comparison of the SES achievement gaps from 2000 to 2015", Pompeu Fabra University (€300)

Full travel stipend to the Visualization Retreat Rostock, Max Planck Institute of Demography

2016 Pompeu Fabra EBES grant to 'EERA Summer School: Methods and Methodology in Educational Research', Linz University (€600)

2015 Best Master's thesis, Department of Political and Social Science, Pompeu Fabra University

### SELECTED PRESENTATIONS

# **Conference presentations**

2019 "An app for the correction of measurement and sampling error in the European Social Survey", European Survey Research Association, Zagreb, 15-19 July

2018 "Interacting with the datos.gob.es API using opendataes", The National Spanish R Conference, Murcia, 22-23 November

"Ability and Mobility: The Relative Influence of Skills and Social Origin on Social Mobility", European Population Conference, Brussels, 6-9 June

2017 "Visualizing Educational Inequality Around the World: are SES gaps growing over time?", Max Planck Institute for Demographic Research Visualization Retreat, Rostock, 28-29 June

#### **Invited Presentations**

2018 Downloading European data with essurvey, Charles III University of Madrid (September)

"Does curricular tracking explain cross-national variation in achievement gaps?", Universitat Barcelona (February)

The essurvey package, University of Southampton (January)

2017 Introduction to the tidyverse, PyData Conference, Barcelona (May) [Course]

### Presentation meet ups

2019 'Downloading European data with essurvey' and 'Accessing Spanish public data with opendataes', Canary Islands R meetup (March)

2018 Downloading Spanish public data with opendataes, Madrid R meetup (November)

### TEACHING AND MENTORING EXPERIENCE

### **Teaching assistant**

2015 Teaching Assistant, Statistics 101 for Political Science with Dr. Bruno Arpino

# **Graduate Mentoring**

2017 Introduction to the tidyverse and functional programming, Econ and Pol Sci Departments, Pompeu Fabra University (March) [Course]

2016 Introduction to R programming and its strengths, RECSM Institute (April) [Presentation]

Getting familiar with R objects, DEMOSOC Research Group (April) [Course]

### **Short courses**

2017- Introduction to R - Barcelona Summer School in Survey Methodology with Basilio Moreno, 2017, 2018, 2019 [Course]

### TEACHING INTERESTS

Social/Geographical Mobility; Introductory and Advanced Quantitative Methods; Data Science applied to Social Science; Social Science Research Design; Social Inequalities; Big data and Demography

### ACADEMIC SKILLS AND LANGUAGES

### **Short Methods Courses**

2018	Text Mining & Natural language Processing, Department of Mathematics, University of Murcia
2018	Introduction to Bayesian Inference and Stan, Newcastle University
2016	EERA Summer School: Methods and Methodology in Educational Research, Linz University
2016	Analyzing Comparative Longitudinal Survey Data with Multilevel Modelling, RECSM Summer
2016	School Probability Sampling Methods, RECSM Summer School
2015	Causal Inference in Observational Studies, Pompeu Fabra University
2013	Protecting Human Research Participants, National Institute of Health (NIH) of the United
	States

Languages: Spanish (native), English (fluent)

#### PROFESSIONAL ACTIVITIES AND SERVICE

# University/Departamental

2017-2018 Graduate representative PhD program

2017 Co-organizer of the RECSM RonR! meeting group and seminars

2016 Adaptation of the Randomization guide from the Abdul Latif Jameel Poverty

Action Lab (J-PAL) to R. [Link]

# **Professional Memberships**

Comparative and International Education Society

Foundation for Open Access Statistics

International Union for the Scientific Study of Population (IUSSP)

### REFERENCES

Gøsta Esping-Andersen Professor of Sociology Bocconi University & Pompeu Fabra University gosta.esping@upf.edu +34 93 542-2649

Sebastian Klüsener Research Director, Head of the research area Demographic Change and Ageing Federal Institute for Population Research sebastian.kluesener@bib.bund.de 0611 75 4345

Bruno Arpino Associate Professor of Statistics Department of Statistics and Computer Science University of Florence bruno.arpino@unifi.it

Wiebke Weber Head of the European Social Survey ERIC Core Scientific Team Research and Expertise Centre for Survey Methodology (RECSM) Pompeu Fabra University wiebke.weber@upf.edu (34) 93 542 1163

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