

# JORGE CIMENTADA

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## CONTACT INFORMATION

Max Planck Institute of Demographic Research  
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*Google Scholar*  
*Github:* [github/cimentadaj](https://github.com/cimentadaj)

## EDUCATION

- |           |       |   |
|-----------|-------|---|
| 2015/2019 | Ph.D. | Pompeu Fabra University, Political and Social Sciences<br><i>Fields: Sociology and Social inequalities</i><br>Dissertation: “Educational institutions and their effect on inequality: Three Papers on Educational Systems and Inequality of Achievement and Opportunity”<br>Advisors: Gøsta Esping-Andersen, Bruno Arpino<br>Awarded <b>best PhD paper Prize (2017)</b> |
| 2014/2015 | M.Sc. | Pompeu Fabra University, Research in Sociology and Demography<br>Advisors: Gøsta Esping-Andersen, Bruno Arpino  |
| 2009/2013 | B.A.  | PUCMM University, Business  |

## RESEARCH INTERESTS

Social/Geographical Mobility      Computational Statistics      Demography      Social Inequalities

## CURRENT POSITIONS

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|-------|---|
| 2019- | <i>Research Scientist</i><br>Laboratory of Digital and Computational Demography<br>Max Planck Institute of Demographic Research                                     |
| 2019- | <i>Research affiliate</i><br>ERC Project: Institutional Family Demography<br>Dondena Centre for Research on Social Dynamics and Public Policy<br>Bocconi University |
| 2019- | <i>Scientific collaborator</i><br>Sociometric Research Foundation   |
| 2018- | <i>Research affiliate</i><br>Research and Expertise Centre for Survey Methodology<br>Mentor: Wiebke Weber   |

## PAST POSITIONS

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|-----------|---|
| 2018/2019 | <i>Data Scientist</i><br>Kernel Analytics |
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## 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*

**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* [[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,  $\text{\LaTeX}$

## STATISTICAL SOFTWARE

### Scientific and statistical software

opendataes: Interact with the [datos.gob.es](#) API [[website](#)]

sqpr: Access the SQP API and adjust statistical models for measurement error [[website](#)]

essurvey: Download data from the European Social Survey [[CRAN](#), [website](#)]

perccalc: Estimate continuous distributions from categorical variables [[CRAN](#), [website](#)]

coauthornetwork: Explore your network of coauthors from your Google Scholar profile [[Github](#)]

cimentadaj: Personal package [[Github](#)]

### Contributions to other statistical software

corr: 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

2019	Full scholarship to the Summer Institute in Computational Social Science, Oxford University
2018	Best conference presentation 'National Spanish R Conference', Department of Mathematics, University of Murcia (€200)
2017	Pompeu Fabra EBES grant to "Bayesian Inference and Stan", Newcastle University (€600)
2017	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)
2017	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 <a href="#">datos.gob.es</a> API using <a href="#">opendataes</a> ", 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

### Workshops

2019	Summer Institute in Computational Social Science, Oxford University, 15-27 June
2019	Applying big data to Institutional Family Demography, Dondena Centre for Research on Social Dynamics and Public Policy, Bocconi University, 3-6 May

**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 [open-dataes](#)', 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

**SCIENTIFIC REVIEWS****Statistical/Software review**

[rOpenSci](#), [Journal of Open Source Software](#)

## 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 School
2016	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/Departmental

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

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 Bocconi University & Pompeu Fabra University  
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