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Education	Ph.D., in Quantitative Sociology Pompeu Fabra University, Barcelona, Spain <i>Fields:</i> Stratification, Educational stratification <i>Advisors:</i> Gøsta Esping Andersen, Bruno Arpino	2016-
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My research involved collapsing data on over 3 million students to study educational policies and its impact on inequality. The key takeaway is that inequality depends heavily on the level of vocational education of the country.

M.S., in Research in Sociology and Demography 2014/2015
Pompeu Fabra University, Barcelona Spain
Dissertation: Improving cognitive and non-cognitive abilities: Impact evaluation of the AGE program in Mexico
Advisors: Gøsta Esping Andersen, Bruno Arpino
* Awarded best Master Thesis: featured [here](#).

B.A., Market Research 2009/2013
Pontifica Universidad Catolica Madre y Maestria,
Santo Domingo, Dominican Republic.

Designed and implemented a Shiny application to download Spanish translated data from the European Social Survey using my R package `essurvey`. I automated the translations using the Google Translate API and text mining techniques. Also

developed a second application to adjust model predictions for their measurement error. As part of the project, I developed the sqpr R library, a high-level interface to the SQP API where I implemented several algorithms that correct for measurement error.

Data Scientist

2015 - 2017

Pompeu Fabra University

Projects: Stratified Family Dynamics: Polarizing trends in couple behaviour and parenting

Principal Investigator: Gøsta Esping-Andersen

As the main data scientists for the project Stratified Family Dynamics, I performed statistical analysis to study mobility patterns between social classes. I exercised the complete research pipeline of accessing dirty data, cleaning, analyzing noisy records and reporting. In one particular case, I used several classification algorithms to estimate the propensity of mobility, finally landing on Latent Discriminant Analysis because the predictive classes were stable and had a very low out-of-sample error.

Statistical consulting

2014

Population Services International

Project: Measuring the impact of preventive HIV campaigns in the Military forces of the Dominican Republic

I designed, implemented and analyzed a randomized controlled trial funded by USAID to evaluate whether a communications campaign in the armed military forces of the Dominican Republic increased knowledge of sexually transmitted diseases. Result showed an increase of HIV awareness by 7% in the population of armed forces. This led to a renovation of funding from the Department of Defense of the United States and USAID. I also collaborated on other projects within PSI working as a statistical consultant on projects on public health and public policy.

Quantitative analyst

2013

Newlink Research

Projects: Public opinion polls, Electoral turnouts, Market analysis

Principal investigator: Eduardo Gamarra

My main job was statistical consulting within the company. I worked on projects related to customer churn, banking, retail and public opinion/political forecasts. The latter involved live-analysis of opinion polls in combination with the Miami Headquarters.

Teaching/Talks	<p>Pompeu Fabra University <i>Department of Political and Social Sciences</i> Teaching Assistant, Statistics 101 for Political Science, May-2015/Jul-2015</p> <p><i>Research and Expertise Centre for Survey Methodology</i></p> <ul style="list-style-type: none"> - Introduction to R programming and its strengths, April 2016 [Presentation] - Getting familiar with R objects, April 2016 [Course] - Introduction to the tidyverse and functional programming, March 2017 [Course] - Introduction to R - Barcelona Summer School in Survey Methodology, Jun-Jul 2017 [Course] <p><i>Invited talks</i></p> <ul style="list-style-type: none"> - Introduction to the tidyverse - PyData Conference, May-2017 [Course] - The essurvey package - University of Southampton, January 2018
Academic skills	<p>Past training:</p> <ul style="list-style-type: none"> - Introduction to Bayesian Inference and Stan, Newcastle University - December 7-8, 2017 - Max Planck Institute for Demographic Research Visualization Retreat (awarded full stipend) - June 26-28, 2017 - EERA Summer School: Methods and Methodology in Educational Research, Linz University, July 10-15, 2016 - Probability Sampling Methods, Pompeu Fabra University, June 27 - July 1, 2016 - Analysing Comparative Longitudinal Survey Data with Multilevel Modelling, Pompeu Fabra University, July 6-7, 2016 - Methodological seminar on Causal Inference, Pompeu Fabra University, May 18-20, 2015 - Protecting Human Research Participants, National Institute of Health (NIH) of the United States, May, 2013. <p>Datasets: Programme for the International Assessment of Adult Competencies (PIAAC), International Adult Literacy Survey (IALS), General Social Survey (GSS), European Social Survey (ESS), Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación (PERCE, SERCE and TERCE waves)</p>
Extra-curricular	<ul style="list-style-type: none"> - Co-organizer of the RECSM RonR! meeting group and seminars - Adaptation of the Randomization guide from the Abdul Latif Jameel Poverty Action Lab (J-PAL) to R. [Link] - PhD Representative years 2017-2018
Languages and Skills	<p>Spanish(native), English (fluent)</p> <p>R, Python, Stata, Git, Bash, SQL, SAS (basic), Regular Expressions, \LaTeX, Microsoft Excel & Office</p>
Software	<p>sqpr: Access the SQP API and adjust your estimations for measurement error.</p> <p>essurvey: Download data from the European Social Survey [CRAN, Package website]</p> <p>perccalc: Estimate continuous distributions from categorical variables [CRAN, Github]</p> <p>coauthornetwork: Explore your network of coauthors from your Google Scholar profile [Github]</p>

cimentadaj: Personal package [[Github](#)]
corr: Exploring correlations in a ‘tidy’ format. **Contributor** [[Github](#)]
broom: Convert statistical analysis objects into tidy format **Contributor** [[Github](#)]

Professional Memberships Comparative and International Education Society
Foundation for Open Access Statistics

Working papers Esping-Andersen, G. & Cimentada, J., Ability and Mobility: Cognitive Skills and Life Course Destinies (2017) - Revise and resubmit to Social Science Research

Cimentada, J. & Kluesner, S., Exploring the Demographic History of Populations with Enhanced Lexis Surfaces, submitted to a special issue of Demographic Research.