

Sofía Gil-Clavel

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EDUCATION

Max Planck Institute for Demographic Research, Germany

Ph.D. Student, Digital and Computational Demography Laboratory.
Supervisor: Emilio Zagheni (MPIDR)

September, 2018-.

Part of the International Max Planck Research School
for Population, Health and Data Science (IMPRS-PHDS).

September, 2019-.

Center of Mathematics Research (CIMAT), Mexico

Master of Science with a Specialization on Computing and Industrial Mathematics.
Supervisors: Dr. Johan Van Horebeek, CIMAT, and Dr. Rafael Garduño Rivera, CIDE.

2015-2017

National Autonomous University of Mexico (UNAM), Mexico

Bachelor of Science in Actuarial Science.
Supervisor: Dr. Víctor Manuel García Guerrero, COLMEX.

2009-2014

WORK EXPERIENCE

National Population Council (CONAPO)

Head of the Demographic Analysis Department.

Activities to develop: Creation of computational tools for visualizing and analyzing Mexican conciliation data (1950-2015) and the Mexican projected population (2016-2050). Demographic data analysis of population, deaths, births, and migration.

2017-2018

Center of Demographic, Urban, and Environmental Studies (CEDUA) of COLMEX

Research support.

Activities to develop: Development of the R package “DemosR: Package for the Stochastic Population Forecast”¹. Analysis and handling of big data for demographic research.

2014-2015

PUBLICATIONS

- Sofia Gil-Clavel and Emilio Zagheni, *Demographic Differentials in Facebook Usage Around the World*, Proceedings of the Thirteenth International AAAI Conference on Web and Social Media (ICWSM 2019): 11-14 June 2019, Munich, Germany, 647–650. Palo Alto, CA: AAAI Press. (2019)

¹ COLMEX internal use.

- Alburez-Gutierrez, D., Aref, S., **Gil-Clavel, S.**, Grow, A., Negraia, D. V., Zagheni, E., *Demography in the digital era: new data sources for population research*, Smart statistics for smart applications : book of short papers SIS2019, 23–30, Pearson. (2019)

PRESENTATIONS AT CONFERENCES

- *Iván Williams* and *Sofía Gil-Clavel*, “Online obituaries for the study of death coverage in small areas. An initial exploration.”, presented at XV Jornadas Argentinas de Estudios de Población - II Congreso Internacional de Población del Cono Sur (AEPA-2019). September 2019.
- *Sofía Gil-Clavel* and Emilio Zagheni, “Demographic Differentials in Facebook Usage Around the World”, poster presented at The International AAAI Conference on Web and Social Media (ICWSM-2019). June 2019.
- *Sofía Gil-Clavel* and Emilio Zagheni, “Demographic Differentials in Facebook Usage Around the World”, presented at IUSSP Digital Demography in the Era of Big Data. June 2019.
- *Sofía Gil-Clavel* and Emilio Zagheni, “Demographic Differentials in Facebook Usage Around the World”, poster presented at Population Fest 2019 (PopFest2019). May 2019.
- *Sofía Gil-Clavel*, “Estimation of the infant mortality rate in Mexico in 2015 at municipal level using numerical techniques”, presented at the XIV National Meeting of the Mexican Society of Demography (SOMEDE). June 2018.

PROFESSIONAL ACTIVITIES

- Give a [training Workshop](#) at IUSSP Digital Demography in the Era of Big Data Pre-Workshop: *Demography Today Training* ([link](#)). June 2019.
- Organizer at the ICWSM 2019 Workshop: *Demographic Research with Web and Social Media Data* ([link](#)). June 2019.

TRAINING AND COURSES

- Using the GWDG Scientific Compute Clusters – An Introduction. October 2018.
- Parallel Programming with MPI (Including MPI for Python). October 2018.
- Attendance at the “France-Mexico School on Data-Analysis” organized by the French Embassy in Mexico and the Mathematic Institute of UNAM. December 2017.
- Attendance at the “France-Mexico Meeting on Data Analysis” organized by the French Embassy in Mexico and the Mathematic Institute of UNAM. November 2016.

SKILLS

- Programming: C++, VBA, Python, R
- Data visualization and exploration: R (shiny, ggplot, plotly), Gephi.
- Text processing: LATEX

LANGUAGES

Spanish (native), **English** (advanced), **German** (intermediate)