GOMEZ VARGAS ANDREA

Sociologist & Population Data Analyst

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WORK EXPERIENCE

Population Statistics Analyst   Aug 2021 - Present
National Institute of Statistics and Censuses (INDEC) - Argentina

- Led the conceptualisation, measurement, and dissemination of wellbeing indicators for Argentina by developing the Integrated System of Social Statistics (SIES). Managed the full project lifecycle, from theoretical framework revision to the computation of 2,400+ indicators at national and jurisdictional levels, launched via interactive Shiny applications.
- Produced the definitive thematic reports for the 2022 Population Census, computing key indicators and synthesizing official results across core analytical dimensions, including fertility, migration, and economic activity.
- Core technical contributor, Working Group for the *"Guidelines for the Design of an Integrated Wellbeing Indicators System for Latin America and the Caribbean"*. Coordinated methodological drafting and regional technical exchanges between Argentina (lead country), the ECLAC Statistics Division, and National Statistical Offices (NSOs) across the LAC region (2024–2025).

POLICY & STATISTICAL OUTPUTS (SELECTED)

- Guidelines for the Design of an Integrated Wellbeing Indicators System — CEA–ECLAC (2024–2025)
- Integrated System of Social Statistics (SIES) — Shiny application
- 2022 Population Census: Summary of Results
- National Time Use Survey 2021: Results
- Statistical Dossiers: Women; Older Persons; Children and Adolescents

POLICY & ADVISORY EXPERIENCE

Data Analysis Consultant   Aug 2024 - Sep 2024
Fundación Huésped: Prevention, Science, and Human Rights

- Led the end-to-end data processing and reporting for the 2024 Health Survey for Migrant Populations in the Buenos Aires Metropolitan Area (AMBA).
- Developed and analyzed 50+ key indicators focused on healthcare access, living conditions in vulnerable settlements, and knowledge/prevention of STIs and HIV.
- Synthesized complex survey data into technical reports, using advanced visualization to highlight the intersection of migration status, health literacy, and socio-economic barriers.

Technical Consultant   Mar 2023 - Oct 2023
General Direction of Women's Labor Insertion, Government of the City of Buenos Aires.

- Designed and delivered a specialized training program for women aimed at bridging the gender gap in the IT sector through labor insertion strategies.

- Authored a comprehensive career guidebook outlining the importance of women in tech, educational pathways, and strategic resources for professional development.
- Conducted field-based workshops and outreach in diverse neighborhoods and municipal job fairs, providing direct mentorship on entering the digital economy.
- Advocated for gender equity in technology, translating complex industry trends into accessible tools for women in vulnerable socio-economic contexts.

Data Management Consultant   Oct 2022 - Jan 2023
Organization of Ibero-American States, Argentina National Office
- Supported the National System of Cultural Information (SInCA) in the standardization and homogenization of large-scale databases from the National Survey of Cultural Consumption.
- Developed relational data schemas to harmonize survey questions across different time periods, ensuring longitudinal consistency and improving data quality for research.

LEADERSHIP & COMMUNITY ENGAGEMENT

Team Lead, R en Buenos Aires (2024–Present)
Lead the local organising team and coordinate community events on the use of R for open data and reproducible research across academia, industry and public institutions.

Global Team Member, R-Ladies (2023–Present)
Contribute to international coordination and community initiatives promoting participation and mentorship for women and gender minorities in the R community.

SOFTWARE & OPEN SOURCE PROJECTS

Author and Maintainer   Aug 2024 - Present
ARcenso: Open-source R data package that transforms fragmented Argentine census spreadsheets into harmonised, reproducible datasets for research and public-sector use.
Website: https://soyandrea.github.io/arcenso

FELLOWSHIPS AND SCHOLARSHIPS

R Developer Day Scholarship | University of Warwick, UK | 2025
- Awarded a full scholarship for in-person participation at R Developer Day (satellite event of RSECon25) based on contributions to the R community.
- Collaborated with international developers on core R development tasks, fostering global cooperation in Research Software Engineering.

rOpenSci Champions Program | rOpenSci Fellowship | Cohort 2023 – 2024
- Selected as 1 of only 10 champions globally from 98 applicants, demonstrating a high level of technical merit and leadership potential.

- Developed arcenso, an R package that provides reproducible access to Argentina's census data, under the mentorship of international open-source experts.

PRESENTATIONS & WORKSHOPS
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"Arcenso: A Package Born from Chaos, Powered by Community", Session Talk (*Package Lifecycle*) - *useR! 2025: The R User Conference*, Duke University, Durham, NC, United States. (Ago 2025) Video available.

"arcenso: Data from Argentina's Population Census", Lightning Talk - *Government Advances in Statistical Programming (GASP)*, Virtual Conference (June 2025)

"Data from Argentina's Population Census", R en Buenos Aires & R-Ladies Buenos Aires Meetup, Buenos Aires, Argentina (Dec, 2024)

"Arcenso: First Steps in Developing a Community Package with rOpenSci", Session Talk (*Package Development Process*) – *LatinR 2024: Latin American Conference on the Use of R in Research and Development*, Virtual (Nov, 2024)

"R for Social Demography: an Applied Workshop with the Permanent Household Survey (EPH)", Workshop - National University of La Matanza, Argentina (Oct, 2024)

TEACHING
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Instructor, Training Course: "Interactive Applications with R and Shiny for Research", National Scientific and Technical Research Council (CONICET), Argentina (Jun–Jul 2025).

Adjunct Lecturer, "Data Visualisation", BSc in Data Science, Guillermo Brown National University (UNaB), Argentina (Aug 2023–Jul 2024)

Postgraduate Lecturer, Graduate Diploma in "Computational Social Sciences and Digital Humanities", National University of San Martín (UNSAM), Argentina (May–Dec 2023)

Technical–Pedagogical Tutor, Postgraduate Course: "Big Data and Territorial Intelligence", Latin American Faculty of Social Sciences (FLACSO), Argentina (Apr 2021–Nov 2022)

Teaching Assistant (unpaid appointment), "Reproductive Rights and Sexual Health from a Social Sciences Perspective", BA in Social Work, University of Buenos Aires (UBA), Argentina (Jan 2020–Dec 2023)

EDUCATION
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Bachelor of Sociology, 2021
University of Buenos Aires

LANGUAGES
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English: Advanced (C1); **Spanish:** Native speaker

TECHNICAL SKILLS
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- **Languages and Statistical Software:** Python, R, SQL
- **Data Visualization:** Shiny, Plotly, Ggplot2, Leaflet
- **Reproducible Research & Authoring:** Quarto, R Markdown
- **Version Control & Collaboration:** Git, GitHub, GitLab