

# Elías Gálvez-Arango

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## Education

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Stanford University | B.A. Urban Studies with Honors 2021  
Minor in Modern Languages (Portuguese and Spanish)

## Peer-Reviewed Articles

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Gálvez-Arango, E. (2025). Access to public transportation at the regional scale: An analysis of bus services in Minas Gerais State, Brazil. *Case Studies on Transport Policy*, 19, 101348. <https://doi.org/10.1016/j.cstp.2024.101348>

Jennings, W. C., Gálvez-Arango, E., Prieto, A. L., & Boehm, A. B. (2020). CrAssphage for fecal source tracking in Chile: Covariation with norovirus, HF183, and bacterial indicators. *Water Research X*, 9, 100071. <https://doi.org/10.1016/j.wroa.2020.100071>

Kolar, M. A., Goh, A., Gálvez-Arango, E., Morris, B., Romano, A., Turley, S., Colello, S., Penniman, W., Boffa, J., Wang, C., Depaul, G., & Keene, K. (2019). Archaeoacoustics Fieldwork for Aural Heritage Conservation: Collaborative Distributed Sound-Sensing at Chavín de Huántar, Perú. *Change Over Time*, 9(2), 164–191. <https://doi.org/10.1353/cot.2019.0010>

## Other Publications

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Emmons, C., & Gálvez-Arango, E. (2025). ElectionGuide Codebook, Version 3. International Foundation for Electoral Systems. <https://electionguide.org/p/methodology/>.

Gálvez-Arango, E., Balbuena, N., & Aylward, B. (2022). WASH Access and its Determinants: Population Growth, Water Scarcity, and Foreign Aid. Mercy Corps Working Paper.

Gálvez-Arango, E. (2021). An Atlas of Urban Latin America. In *Stanford University Urban Studies Capstone Projects and Theses*. <https://purl.stanford.edu/bp765sr9968>

Selecting Comparison Districts. (2020). Stanford Program on Water, Health & Development. Conrad N. Hilton Foundation Safe Water Initiative Briefing Series. <https://water.stanford.edu/selecting-comparison-districts>.

## Research Experience

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*Research Fellow – Brazil | Fulbright Program* 2022

- Performed first statewide study of intermunicipal bus access in Brazil
- Identified municipal characteristics associated with high or low bus access using spatial, demographic, economic data and non-parametric statistics
- Reviewed academic literature, transportation law and policy documents

*Research Assistant | Jenna Davis Research Group (Stanford Engineering)* 2019-2020

- Collected and visualized infrastructure accessibility and poverty data in QGIS, Excel
- Developed site selection criteria for multi-country piped water experiment
- Designed maps and infographics for broad audience of international stakeholders

*Research Assistant | Boehm Research Group (Stanford Engineering)* 2019

- Mapped land use, informal settlement, and hydrologic resources in Santiago de Chile
- Planned water quality sampling campaign in consultation with local stakeholders
- Processed sample data and designed maps for journal article in *Water Research X*

*Research Assistant | Salinas History Project - Dr. Carol McKibben* 2018

- Analyzed census data with spatial statistics to identify residential segregation
- Coordinated field visits and work assignments for team of 10 research assistants
- Presented findings to Salinas City Council and Human Cities Expo

*Research Assistant | Chavín de Huántar Archaeological Project* 2018

- Excavated, identified, and organized artifacts throughout World Heritage Site
- Designed and conducted acoustic pilot experiment in ceremonial plaza
- Provided GIS support for specimen inventory and landslide preparedness project

**Professional Experience**

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*Bus Performance Analyst | Washington Metropolitan Area Transit Authority* 2025 – present

- Analyzes time-series bus service and fleet data to identify performance trends
- Conducts ad hoc quantitative analyses via SQL and R
- Designs automated, user-friendly Power BI reports to inform agency leaders

*Democracy Data Officer | International Foundation for Electoral Systems* 2023 - 2025

- Analyzed survey data on democratic governance in R and electoral laws
- Maintained global election database and tracked 120+ national elections each year
- Created data visualizations (dashboards, apps, maps) and technical documentation
- Liaised with donors, government and civil society partners, and database users

*Water Resources and WASH Intern | Mercy Corps* 2021-2022

- Analyzed secondary data on water services and foreign aid in 148 countries
- Conducted hydrologic analysis of proposed well and dam projects in Jordan

- Provided GIS support: spatial analysis, cartography, QGIS tutorials

### Conference Participation

Análise da Acessibilidade do Sistema de Ônibus Intermunicipal de Minas Gerais [Accessibility Analysis of the Intermunicipal Bus System of Minas Gerais]. Elías Gálvez-Arango & Daniela Antunes Lessa. ANPET Congresso de Pesquisa e Ensino em Transportes. *Poster Presentation*. Fortaleza, Brazil. November, 2022.

Mapping the Public Bus System of Minas Gerais, Brazil: Processing Difficult Datasets with OpenStreetMap. Elías Gálvez-Arango. OpenStreetMap State of the Map 2022. *Selected Poster Exhibition*. Virtual. August, 2022.

### Awards and Grants

<i>Fulbright US Student Research Grant</i>   Fulbright Commission in Brazil	2022
<i>Outstanding Thesis Presentation</i>   Stanford Program on Urban Studies	2021
<i>Phi Beta Kappa</i>   Stanford University	2020
<i>Stanford Major Grant</i>   Stanford University	2020
<i>Chavín de Huántar Field Grant</i>   Stanford Archaeological Center	2018
<i>General Henry H. Arnold Education Grant</i>   Air Force Aid Society	2017-2021

### Service

Fulbright Applicant Mentor   Stanford Office of Global Scholarships	2022 - present
Model Scholar Selection Committee   Stanford Program on Urban Studies	2020
Citizenship Exam Tutor   Immigration Institute of the Bay Area	2018

### Computational Skills

Programming	R, SQL, Git, DAX
Geographic Information Systems	QGIS, ArcGIS, GeoDa, Google Earth
Data Visualization	Power BI, Excel, Looker Studio, ArcGIS Storymaps

### Languages

English	Native
Portuguese	Professional: read, write, listen, speak
Spanish	Professional: read, write, listen, speak
French	Professional: read, listen   Intermediate: write, speak