

Daniel Silva da Silva

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EDUCATION

Ph.D. in Geography & Environment. University of Texas at Austin, 2021 to 2025.

M.A. in Geography & Environment. University of Texas at Austin, 2019 to 2021.

B.S. in Economics. University of Amazonia (UNAMA), 2006 to 2010.

ACADEMIC APPOINTMENTS

Texas A&M University, United States.

Position: Lecturer, January 2026 to present date.

Teach undergraduate courses in Environmental Systems Science, develop a new course in Environmental Regulation for Geosciences, and supervise student capstone projects on sustainability and applied environmental analysis.

University of Texas at Austin, United States.

Position: Teaching Assistant, from 2019 to 2024.

I lead laboratory sections to undergrad students, in the topics of Spatial Data Analysis, Geographic Information Systems (GIS), Remote Sensing, and Human Geography.

APPLIED & PRIVATE SECTOR EXPERIENCE

Fama re.capital, São Paulo, SP, Brazil.

Position: Senior Scientist Advisor, from 2023 to current.

Support the investments in decarbonization assessing technologies and scenarios for a feasible low-carbon transition of companies, including environmental risks, impacts, and opportunities for decarbonization.

Mombak Holdings, Sao Paulo, Brazil.

Position: Environmental Economics Lead (remote position), from 2021 to 2022.

Support strategies to achieve compliance with carbon reforestation projects, e.g. deforestation leakage estimates, mapped opportunity costs of land, and developed statistical models for the estimates of biomass growth at different rainfall conditions.

The Amazon Environmental Research Institute (IPAM), Brasilia, Brazil.

Position: Researcher, from 2017 to 2019.

I evaluated economic incentives for the implementation of environmental laws and agricultural intensification in Brazil; and developed a deforestation risk model and

opportunity cost mapping to Amazon to implement a program of payment for conservation in private lands, known as Conserv Program.

International Institute for Sustainability (IIS), Rio de Janeiro, Brazil.

Position: Business analyst, from 2014 to 2016.

I worked on the writing and the analysis of reports/papers to inform the economic benefits of agricultural intensification, and the restoration of biomes such as the Atlantic Rainforest.

Amazon Institute of People and the Environment (Imazon), Belem, Brazil.

Position: Technical Coordinator of projects, from 2010 to 2014.

I coordinated research about the economic performance of farms in the Amazon and analyzed the drivers of deforestation (such as rural credit), then wrote technical reports to support state-level government agencies.

PUBLICATIONS

Peer-review journals:

Silva, D. S., & Arima, E. (2025). When Land Becomes Capital: Farmland Financialization and Sustainability in Brazil. *Environmental Research Letters*. <https://doi.org/10.1088/1748-9326/ae0faf>

Silva, D., Prolo, C., Braga, P., Witzke, A., Gomes, T., Velez, L. (2025) Corporate emissions and climate targets: Insights from high-emitting firms in Brazil's transition to sustainability. *PLOS Sustain Transform* 4(9): e0000198. <https://doi.org/10.1371/journal.pstr.0000198>

Silva, D. S., & Nunes, S. (2025). Leakage Effects from Reforestation: Estimating the Impact of Agricultural Displacement for Carbon Markets. *Land*, 14(5), 963.

Silva, D. S., & Arima, E. Y. (2023). Sustainability Consequences of Making Land Change Decisions Based on Current Climatology in the Brazilian Cerrados. *Land*, 12(4), 914.

Silva, D. S., Arima, E. Y., dos Reis, T. N., & Rattis, L. (2023). Temperature effect on Brazilian soybean yields, and farmers' responses. *International Journal of Agricultural Sustainability*, 21(1), 2173370.

Nunes, S., Gastauer, M., Cavalcante, R. B., Ramos, S. J., Caldeira Jr, C. F., **Silva, D.,** & Siqueira, J. O. (2020). Challenges and opportunities for large-scale reforestation in the Eastern Amazon using native species. *Forest Ecology and Management*, 466, 118120.

Niemeyer, J., Barros, F., **Silva, D.,** Crouzeilles, R., Vale, M. (2020). Planning forest restoration within private land holdings with conservation co-benefits at the landscape scale. *Science of the Total Environment*.

- Stabile, M.C.C., Guimarães, A.L., **Silva, D.S.**, Ribeiro, V., Macedo, M.N., Coe, M.T., Pinto, E., Moutinho, P., Alencar, A. (2019). Solving Brazil's land use puzzle: Increasing production and slowing Amazon deforestation. *Land Use Policy*.
- Castro, A., da Silva Batista, N., Latawiec, A. E., Rodrigues, A., Strassburg, B., **Silva, D.**, & Hale, S. (2018). The effects of Gliricidia-derived biochar on sequential maize and bean farming. *Sustainability*, 10(3), 578.
- Latawiec, A. E., Strassburg, B. B., **Silva, D.**, Alves-Pinto, H. N., Feltran-Barbieri, R., Castro, A., & Beduschi, F. (2017). Improving land management in Brazil: A perspective from producers. *Agriculture, Ecosystems & Environment*, 240, 276-286.
- Strassburg, B. B. N., Barros, F. S. M., Crouzeilles, R., Iribarrem, A., Santos, J. S. d., **Silva, D.**, Sansevero, J. B. B., Alves-Pinto, H. N., Feltran-Barbieri, R. and Latawiec, A. E. (2016). The role of natural regeneration to ecosystem services provision and habitat availability: a case study in the Brazilian Atlantic Forest. *Biotropica*, 48: 890–899. Doi:10.1111/btp.12393

Conference papers:

- Savian, G. C. P. S., Stabile, M. C. C., Moutinho, P. R. S., Siqueira, E. D., Russo, G., Ribeiro, J. P., Ribeiro, V., **Silva, D. S.**, Mitraud, S., Gomes, J., Cardoso, A., Espinoza, J., Cabral, R., Lessa Silveira, D., Disarz, R., Mastrangelo, J. P., Reydon, B., & Siqueira, G. P. (2019). Land tenure regularization in the Brazilian Amazon: Perspectives on identifying social economic and environmental variables for assessing its impacts. Conference: Land and Poverty Conference 2019, at Washington, DC. Available at: https://www.researchgate.net/publication/332275679_Land_tenure_regularization_in_the_Brazilian_Amazon_Perspectives_on_identifying_social_economic_and_environmental_variables_for_assessing_its_impacts
- Reis, T., Russo, G., Ribeiro, V., Moutinho, P., Guimarães, A., Stabile, M., Alencar, A., Crisostomo, A. C., **Silva, D.**, & Shimbo, J. (2017). Climate challenges and opportunities in the Brazilian Cerrado. Paper presented at the Conference: UNFCCC COP23 - Side events at: Bonn, Germany. Available at: <https://ipam.org.br/wp-content/uploads/2017/11/PB-Cerrado-COP23-web.pdf>
- Barreto, P. & **Silva, D.** (2010). Will cattle ranching continue to drive deforestation in the Brazilian Amazon? Paper presented at the International Conference on environment and natural resource management in developing economies and transition, in Clermont Ferrand, France. Available in: <http://www.cerdi.org/uploads/sfCmsContent/html/323/Barreto.pdf>.

Barreto, P., **Silva, D.S.** (2010). Os desafios para uma pecuária mais sustentável na Amazônia. In: International environmental law congress, 2010, São Paulo. Forests, climate change and ecological services. São Paulo: Imprensa oficial do estado de São Paulo, 2010. v. 1. p. 317-324.

Technical reports:

Silva, D., Nunes, S. (2017). Evaluation and economic modeling of forest restoration in the State of Pará, eastern Brazilian Amazon (p. 92). Belém: Imazon.

Silva, D., Stabile, M., Bauch, S. (2017). Instrumentos financeiros para a agricultura sustentável: O estudo de caso do Mato Grosso. DOI: 10.13140/RG.2.2.28490.21442 . Available at: https://www.researchgate.net/publication/328562903_Instrumentos_financeiros_para_a_agricultura_sustentavel_O_estudo_de_caso_do_Mato_Grosso

Silva, D., & Barreto, P. (2014). O potencial do Imposto Territorial Rural contra o desmatamento especulativo na Amazônia [study cited in Mongabay (4 nov 2014): [Reducing tax evasion could help to save the Amazon](#)]. Belém: Imazon.

Barreto, P., **Silva, D.** (2013). How can one develop the rural economy without deforesting the Amazon? Belém: Imazon.

Barreto, P., Brandão Jr, A., Martins, H., **Silva, D.**, Souza Jr, C., Sales, M., & Feitosa, T. (2011). Risco de desmatamento associado à hidrelétrica de Belo Monte [Required study for the mitigation policies related to the Belo Monte Hydropower Dam in the Amazon]. Belém: Imazon.

AWARDS AND FELLOWSHIPS

University Graduate Continuing Fellowship for 2024-2025

David L. Huff Memorial Graduate Fellowship, 2022

Connect Program Fellowship, 2022

International Education Fee Scholarship, 2022

Global Career Launch Program, 2022

AAG Council Award for Best Graduate Student Paper at the Regional Division meeting, 2021

PRESENTATIONS IN CONFERENCES AND PANEL SESSIONS

American Association of Geographers (AAG) meetings of 2021, 2022, and 2023

Southwest AAG meetings of 2019, 2020, 2021, and 2022

Latin American studies (LILLAS), University of Texas, Austin, 2020

Brazilian Congress, panel on Brazilian Rural Environmental Registry, Brasilia, Brazil, 2017

VOLUNTARY AND PROFESSIONAL SERVICE

Review for Global Environmental Change, 2023

Serving as a volunteer reviewer for Hispanic Scholarship Consortium, 2023

Consultancy to farmers and policy-oriented institutions supporting research and analysis.

Senior Advisor for startup and companies in Brazil, such as Restauragro.

SKILLS & INTERESTS

Languages: English (fluent), and Portuguese (native speaker).

Technical: Coding data analysis and visualization in Python, and R.