github: lcgodoy

Porto Alegre, Brazil

Aug '23-May '24

STORRS, CT

STORRS, CT

# Lucas da Cunha Godoy

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#### Education

Universidade Federal do Rio Grande do Sul

**Bachelor degree in Statistics** 

2011-2016

Introduction to geostatistical modeling for counting data: Parameters estimation with different MCMC algorithms

Universidade Federal de Minas Gerais Belo Horizonte, Brazil 2017-2019

**Master in Statistics** Testing Spatial Association Between Two Types Polygons

Advisor: Renato Assunção

University of Connecticut STORRS, CT

M.Sc. in Statistics 2019-2022 2019-2024 Ph.D. in Statistics (GPA: 3.640)

Hausdorff-Gaussian Process with Spatial and Spatiotemporal Applications

Advisor: Jun Yan

### **Professional Experience**

EEB-University of California Santa Cruz SANTA CRUZ, CA

Postdoctoral Researcher. Jun '24-present

Analyses of range shifts in species distributions.

Statistical Consulting Services-University of Connecticut STORRS, CT

Graduate assistant.

Walk-in statistical consulting.

High Performance Computing-University of Connecticut

Graduate assistant. Aug '22-May '23

System administration, development and maintenance of apptainer containers to assure reproducibil-

ity and compatibility between newer operating systems and old software. Support to the users of the

Department of Statistics-University of Connecticut

Statistics Cluster Admin. Jun '21 – present

Management of the R packages and system requirements on the Cluster. Development and maintenance of singularity containers to assure analyses reproducibility.

Biostatistics Center–University of Connecticut Health Center

FARMINGTON, CT **Graduate Assistant** Sep '20-Dec '23

Statistical consulting for UConn Health Center researchers.

Agibank Porto Alegre, Brazil

Dez '18-Jun '19 **Data Scientist** 

Development of predictive models for debt collection and dashboards for monitoring its performance.

Grupo Conectt Porto Alegre, Brazil

**Digital Intelligence Analyst** Sep '16-Mar '17

Development of interactive monthly reports based on web data. Predictive modeling on which leads were more likely to become clients.

Universidade Federal do Rio Grande do Sul

PORTO ALEGRE, BRAZIL

Undergraduate Research Assistant (AMBES project-Petrobras) Apr 15-Dec 15 Geostatistical modeling to predict and understand the impact of oil platforms' physical chemical

characteristics of the ocean.

#### **Undergraduate Research Assistant**

May '11-Dec '14

Investigating social inequalities and their impact on public health in Brazil under the supervision of Professor Sergio Bassanesi.

#### Instituto Brasileiro de Geografia e Estatística

#### **Supervisor Agent-Census**

Mar '10-Nov '10

Organization, supervision, and monitoring of data collection during the 2010 Census.

### **Teaching Experience**

University of Connecticut

STORRS, CT

**Principal Instructor** 

Fall 2020–Spring 2022

STAT 3445-Introduction to Mathematical Statistics II.

Lecturer

Uniritter

Porto Alegre, Brazil Spring 2019

Data analysis using R.

### Peer-Reviewed Articles-Methodology

Godoy, L. d. C., Assunção, R. M., & Butler, K. A. (2022). Testing the spatial association of different types of polygons. Spatial Statistics, 51, 100695. https://doi.org/https://doi.org/10.1016/j.spasta.2022.100695

Prates, M. O., Azevedo, D. R. M., Godoy, L. d. C., & Bandyopadhyay, D. (2021). Can gaussian markov random fields handle spatial confounding? Journal of the Indian Statistical Association, 59(2), 197–220.

### Peer-Reviewed Articles-Applications

- Abu-Arqub, S., Hariharan, A., Banankhah, S., Godoy, L. d. C., Liu, P., Kuo, C.-L., & Uribe, F. (0). Accuracy of full arch scans using the itero element 2® intra-oral scanner: A clinical study [PMID: 39135489]. Journal of Orthodontics, 0(0), 0–0. https://doi.org/10.1177/14653125241268755
- Frank, S., Ibrahim, B., Feng, R., Bidra, A., Lafreniere, D., Kuo, C.-L., Godoy, L. d. C., & Falcone, T. E. (n.d.). Tolerability of nasal and oral povidone-iodine antisepsis for in-office procedures. Clinical Otolaryngology. https://doi.org/https://doi.org/10.1111/coa.14045
- Abu Arqub, S., Al-Moghrabi, D., Kuo, C.-L., Godoy, L. d. C., & Uribe, F. (2024). Perceptions and utilization of tele-orthodontics: A survey of the members of the american association of orthodontists. Progress in Orthodontics, 25(1), 16.
- Abu-Arqub, S., Greene, R., Greene, S., Laing, K., Kuo, C., Godov, L. d. C., & Uribe, F. (2024). Retrospective evaluation of the success rate and factors associated with the stability of alveolar ridge orthodontic miniscrews: Pilot study. Journal of the World Federation of Orthodontists. https://doi.org/https://doi.org/10. 1016/j.ejwf.2024.02.001
- Andreyeva, T., Moore, T. E., Godoy, L. d. C., & Kenney, E. L. (2024). Federal nutrition assistance for young children: Underutilized and unequally accessed. American Journal of Preventive Medicine, 66(1), 18–26. https://doi.org/https://doi.org/10.1016/j.amepre.2023.09.008
- Fryc, G. A., Godoy, L. d. C., Kuo, C.-L., & Lurie, A. G. (2024). Prevalence of likely retro-odontoid pseudotumor in patients receiving dental cbct examinations. Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology, 137(3), 301–309. https://doi.org/https://doi.org/10.1016/j.oooo.2023.11.005
- Irsheid, R., Godoy, L. D. C., Kuo, C.-L., Metz, J., Dolce, C., & Abu Arqub, S. (2024). Comparative assessment of the clinical outcomes of clear aligners compared to fixed appliance in class ii malocclusion. Clinical *Oral Investigations*, 28(8), 1–10.
- Abu Arqub, S., Greene, R., Greene, S., Laing, K., Kuo, C.-L., Godoy, L. d. C., & Uribe, F. (2023). Ridge mini-implants, a versatile biomechanical anchorage device whose success is significantly enhanced by splinting: A clinical report. *Progress in Orthodontics*, 24(1), 27.
- Abu-Arqub, S., Ahmida, A., Godoy, L.d.C., Kuo, C.-L., Upadhyay, M., & Yadav, S. (2023). Insight into clear aligner therapy protocols and preferences among members of the american association of orthodontists in the united states and canada. The Angle Orthodontist.
- Arqub, S. A., Bashir, R., Obeng, K., Godoy, L. d. C., Kuo, C.-L., Upadhyay, M., & Yadav, S. (2023). Survival and failure rate of lower lingual bonded retainers: A retrospective cohort evaluation. Orthodontics & Craniofacial Research, 26(2), 256–264. https://doi.org/https://doi.org/10.1111/ocr.12608
- de Jesus, M., Maheshwary, A., Kumar, M., Godoy, L. d. C., Kuo, C.-L., & Grover, P. (2023). Association of electrocardiographic and echocardiographic variables with neurological outcomes after ischemic stroke. American Heart Journal Plus: Cardiology Research and Practice, 100313.

- Duong, C., Zhu, Q., Aseltine Jr, R. H., Kuo, C.-L., **Godoy**, **L. d. C.**, & Kaufman, B. (2023). A survey on cone-beam computed tomography usage among endodontists in the united states. *Journal of Endodontics*.
- Harandi, M. T., Abu Arqub, S., Warren, E., Kuo, C.-L., **Godoy**, **L. d. C.**, Mehta, S., Feldman, J., Upadhyay, M., & Yadav, S. (2023). Assessment of clear aligner accuracy of 2 clear aligners systems. *American Journal of Orthodontics and Dentofacial Orthopedics*. https://doi.org/https://doi.org/10.1016/j.ajodo.2023.05.028
- Kuo, C.-L., Liu, R., **Godoy**, **L. d. C.**, Pilling, L. C., Fortinsky, R. H., & Brugge, D. (2023). Association between residential exposure to air pollution and incident coronary heart disease is not mediated by leukocyte telomere length: A uk biobank study. *Toxics*, 11(6). https://doi.org/10.3390/toxics11060489
- Leonard, J. F., Taxel, P., Kuo, C.-L., **Godoy**, **L. d. C.**, & Freilich, M. (2023). Dental implant and bone augmentation treatment in bone-compromised patients: Oral health-related quality of life outcomes. *The Journal of Prosthetic Dentistry*. https://doi.org/https://doi.org/10.1016/j.prosdent.2023.01.011
- Turshudzhyan, A., **Godoy**, L. d. C., Kuo, C.-L., & Wu, G. Y. (2023). Alpha feto-protein expression trends for screening early hepatocellular carcinoma. *Gene Expression*, 22(2), 109–114. https://doi.org/10.14218/GE. 2023 00001
- Arqub, S. A., Banankhah, S., Sharma, R., **Godoy**, **L. d. C.**, Kuo, C.-L., Ahmed, M., Alfardan, M., & Uribe, F. (2022). Association between initial complexity, frequency of refinements, treatment duration, and outcome in Invisalign orthodontic treatment. *American Journal of Orthodontics and Dentofacial Orthopedics*. https://doi.org/https://doi.org/10.1016/j.ajodo.2022.06.017
- Hariharan, A., Arqub, S. A., Gandhi, V., **Godoy**, **L. d. C.**, Kuo, C.-L., & Uribe, F. (2022). Evaluation of interproximal reduction in individual teeth, and full arch assessment in clear aligner therapy: Digital planning versus 3d model analysis after reduction. *Progress in Orthodontics*, 23(1), 1–10.
- Kumar, M., Patil, S., Godoy, L. d. C., Kuo, C.-L., Swede, H., Kuchel, G. A., & Chen, K. (2022). Demand ischemia as a predictor of mortality in older patients with delirium. *Frontiers in Cardiovascular Medicine*, 9.
- Arqub, S. A., Voldman, R., Ahmida, A., Kuo, C.-L., **Godoy**, **L. d. C.**, Nasrawi, Y., Al-Khateeb, S. N., & Uribe, F. (2021). Patients' perceptions of orthodontic treatment experiences during COVID-19: A cross-sectional study. *Progress in Orthodontics*, 22(1), 1–12.
- Boutrous, M. L., Maseto, N., Kuo, C.-L., **Godoy**, **L. d. C.**, & Amankwah, K. (2021). The use of multiple carotid stents is associated with increased incidence of developing in-stent stenosis on long-term follow-up. *Journal of Vascular Surgery*, 74(3), e240–e241.
- Huynh, C., **Godoy**, **L. d. C.**, Kuo, C.-L., Smeds, M., & Amankwah, K. S. (2021). Examining the development of operative autonomy in vascular surgery training and when trainees and program directors agree and disagree. *Annals of Vascular Surgery*, 74, 1–10.
- Lin, G., Murase, J. E., Murrell, D. F., **Godoy**, **L. d. C.**, & Grant-Kels, J. M. (2021). The impact of gender in mentor-mentee success: Results from the women's dermatologic society mentorship survey. *International Journal of Women's Dermatology*.

#### **Pre-Print Articles and Software**

- **Godoy**, **L. d. C.** (2024). *Smile: Spatial misalignment: Interpolation, linkage, and estimation* [R package version 1.0.5]. https://doi.org/10.32614/CRAN.package.smile
- **Godoy**, **L. d. C.**, Prates, M. O., & Yan, J. (2024). Statistical inferences and predictions for areal data and spatial data fusion with hausdorff–gaussian processes. https://arxiv.org/abs/2208.07900

### **Contributed Talks and Posters**

Joint Statistical Meeting 2024

PORTLAND, OR

From Point to Polygon: A Unified Framework for Modeling Spatial Dependence Talk.

Aug '24

The 37<sup>th</sup> New England Statistics Symposium

STORRS, CT

Beyond Traditional Disease Mapping: Hausdorff-Gaussian Process for Spatiotemporal Analysis of Tuberculosis Incidence

May 24
Talk

The EnviBayes workshop on complex environmental data, CSU

FORT COLLINS, CO

Sep '23

Hausdorff–Gaussian process: Unifying spatial data analysis
Poster

The 2022 ISBA World Meeting

Montreal, CA

An unified framework for point-level, areal, and mixed spatial data: The Hausdorff-Gaussian Process Jun 22

Talk.

The 35 <sup>th</sup> New England Statistics Symposium  Model-Based Voronoi linkage between point-referenced data and areal data in spatial analysis with application to the Brazilian election 2018  Talk.  Storrs, CT  May 22	
The 34 <sup>th</sup> New England Statistics Symposium	Storrs, CT
Spatially misaligned data: An application to the 2018 Brazilian presidenti Poster.	al election Oct '21
2 <sup>nd</sup> UConn Sports Analytics Symposium (UCSAS) Automatic team selection in a fantasy football (soccer) Game. Poster.	Storrs, CT Oct '20
1st UConn Sports Analytics Symposium (UCSAS) Bayesian hierarchical models applied to fantasy games. Poster.	Storrs, CT Oct 19
1 <sup>ST</sup> CONFERENCE ON STATISTICS AND DATA SCIENCE Voronoi Data Linkage: Extracting data from polygons to points. Contributed Talk.	Salvador, Brazil <i>Nov '18</i>
63TH MEETING FROM THE BRAZILIAN CHAPTER OF THE INTERNATIONAL BIOMETRIC BRAZIL	Society (RBRAS)Curitiba,
Voronoi Cells: Visualizing intramunicipality votes distribution Contributed Talk.	May '18
XIV Brazilian meeting on Bayesian Statistics (EBEB)  A Bayesian mixture model to fit players performance in fantasy games Poster	Rio de Janeiro, Brazil <i>Mar '18</i>
Invited Talks	
UConn Sports Analytics Symposium (UCSAS) 2021 Web Scraping for Sports Data with R	Storrs, CT Oct '21
1 <sup>ST</sup> DATATHON - UFRGS Web Scraping, Web Services e API	Porto Alegre, Brazil Nov 18
Graduate Students' Seminars - UFMG Analyzing Brazilian public data	Belo Horizonte, Brazil Aug '18
Awards	
ENVR American Statistical Association—Student Paper Competition Honorable mention.	Portland, OR 2024
The EnviBayes workshop on complex environmental data, CSU Travel Award.	Fort Collins, CO 2023
Graduate School – University of Connecticut Summer Doctoral Dissertation Fellowship.	Storrs, CT 2023
Department of Statistics – University of Connecticut <b>Teaching Award.</b>	Storrs, CT 2021–2022
The 2022 ISBA World Meeting  Travel Award.	Montreal, CA Jun '22
The Graduate School – University of Connecticut Conference Participation Award.	Storrs, CT Jun '22
1st Shiny Contest - RStudio Honorable Mention Voronoys-Understanding voters' profile in Brazilian elections.	United States Apr 19
1 <sup>st</sup> Conference on Statistics and Data Science	Brazil
Best Paper Award on Statistics and Data Science Voronoy Data Linkage: Extracting Data from Polygons to Points.	Nov 18

### Center for Politics and Economics in the Public Sector Studies (CEPESP)-FGV

Brazil

## 1st CEPESP Data Challenge: Deciphering Brazil Elections

Dec '17

The challenge is to find solutions for visualization, search engines, graphic arts and any other tools that facilitate the understanding of the electoral process in Brazil. Always with free and open source software.