# Lucas da Cunha Godoy

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#### Education

Universidade Federal do Rio Grande do Sul

Porto Alegre, Brazil 2011–2016

**Bachelor degree in Statistics** 

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

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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 M.Sc. in Statistics

Storrs, CT 2019–2022

Ph.D. in Statistics (GPA: 3.640)

2019-present

On Statistical Inferences for Spatially Misaligned Data and Spatial Data Fusion

Advisor: Jun Yan

### **Professional Experience**

Statistical Consulting Services-University of Connecticut

Storrs, CT Aug '23–present

Graduate assistant.

Walk-in statistical consulting.

High Performance Computing-University of Connecticut

STORRS, CT

Graduate assistant.

Aug '22–May '23

System administration, development and maintenance of apptainer containers to assure reproducibility and compatibility between newer operating systems and old software. Support to the users of the cluster.

Department of Statistics-University of Connecticut

Storrs, CT

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-present

Statistical consulting for UConn Health Center researchers.

Agibank

Porto Alegre, Brazil

**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.

STORRS, CT

Spring 2019

# **Teaching Experience**

University of Connecticut

**Principal Instructor** 

STAT 3445-Introduction to Mathematical Statistics II.

Fall 2020–Spring 2022

Uniritter Porto Alegre, Brazil

Lecturer Data analysis using R.

# Peer-Reviewed Articles-Methodology

Godov, 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. (2022). Can gaussian markov random fields handle spatial confounding? [In press.]. Journal of the Indian Statistical Association.

### Peer-Reviewed Articles-Applications

- 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., 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*.
- Andreyeva, T., Moore, T. E., Godoy, L. d. C., & Kenney, E. L. (2023). Federal nutrition assistance for young children: Underutilized and unequally accessed. American Journal of Preventive Medicine. https: //doi.org/https://doi.org/10.1016/j.amepre.2023.09.008
- Arqub, S. A., Bashir, R., Obeng, K., Godoy, L. d. C., Kuo, C.-L., Upadhyay, M., & Yaday, 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, (000), 0–0.
- 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. (2022). *Smile: Spatial misalignment: Interpolation, linkage, and estimation* [R package version 1.0.4.1]. https://CRAN.R-project.org/package=smile
- Godoy, L. d. C., Prates, M. O., & Yan, J. (2022). An unified framework for point-level, areal, and mixed spatial data: The hausdorff-gaussian process. https://doi.org/10.48550/ARXIV.2208.07900

#### **Contributed Talks and Posters**

The EnviBayes workshop on complex environmental data, CSU

FORT COLLINS, CO

Hausdorff-Gaussian process: Unifying spatial data analysis

Sep '23

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

STORRS, CT

Model-Based Voronoi linkage between point-referenced data and areal data in spatial analysis with application to the Brazilian election 2018 May '22 Talk.

The 34<sup>th</sup> New England Statistics Symposium

STORRS, CT

Spatially misaligned data: An application to the 2018 Brazilian presidential election

2<sup>nd</sup> UConn Sports Analytics Symposium (UCSAS) STORRS, CT

Automatic team selection in a fantasy football (soccer) Game.

Oct '20

Oct '21

1<sup>st</sup> UConn Sports Analytics Symposium (UCSAS)

STORRS, CT

Bayesian hierarchical models applied to fantasy games.

Oct '19

Poster.

1<sup>ST</sup> CONFERENCE ON STATISTICS AND DATA SCIENCE

Salvador, Brazil

Voronoi Data Linkage: Extracting data from polygons to points. Contributed Talk.

Nov 18

63TH MEETING FROM THE BRAZILIAN CHAPTER OF THE INTERNATIONAL BIOMETRIC SOCIETY (RBRAS) CURITIBA, Brazil

Voronoi Cells: Visualizing intramunicipality votes distribution Contributed Talk.

May '18

XIV Brazilian meeting on Bayesian Statistics (EBEB)

Rio de Janeiro, Brazil

A Bayesian mixture model to fit players performance in fantasy games Poster

Mar '18

#### **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

PORTO ALEGRE, BRAZIL

Web Scraping, Web Services e API

Nov '18

## Graduate Students' Seminars - UFMG Analyzing Brazilian public data

Belo Horizonte, Brazil Aug '18

### **Awards**

The EnviBayes workshop on complex environmental data, CSU FORT COLLINS, CO Travel Award. 2023 Graduate School - University of Connecticut STORRS, CT Summer Doctoral Dissertation Fellowship. 2023 Department of Statistics – University of Connecticut STORRS, CT Teaching Award. 2021-2022 The 2022 ISBA World Meeting Montreal, CA Jun '22 Travel Award. The Graduate School - University of Connecticut STORRS, CT Jun '22 Conference Participation Award. 1st Shiny Contest - RStudio United States **Honorable Mention** Apr '19

Voronoys-Understanding voters' profile in Brazilian elections.

1<sup>st</sup> Conference on Statistics and Data Science

Brazil

Best Paper Award on Statistics and Data Science

Nov 18

Voronoy Data Linkage: Extracting Data from Polygons to Points.

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

1<sup>st</sup> 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.