

JOÃO PEDRO T. T. LUCAS

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Summary

- With two years of hands-on experience as a research assistant at the Pontifical Catholic University of Campinas Observatory and teaching assistant in econometrics coursework, I actively work in two prominent extension programs. The first focused on Productive Structure and Socioeconomic Development, conducting comprehensive studies on foreign trade within the Metropolitan Region of Campinas (MRC). The second, in collaboration with the FEAC foundation, involved conducting a Social Territory Diagnosis. This initiative entailed geocoding data obtained from the Unify Registry (Cadastro Único), a federal program that registers families in social vulnerability. Both projects offered valuable insights for the industrial and third sectors, playing a crucial role in the decision-making processes within the public sectors.

Skills

- Statistics | Econometrics | Spatial Econometrics | Exploratory Spatial Data Analysis (ESDA) | Regional Economics | Development Economics Research | Scientific Writing | GIS Fundamentals | R Language | Data Analysis | Fluent Portuguese and Advanced English

Experience

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|---|--|-----------------------------|--------------------------|
| Research Assistant | <u>Pontifical Catholic University of Campinas</u> | <i>Campinas, SP, Brazil</i> | 03/2023 - Current |
| <ul style="list-style-type: none">Worked in developing the methodology to Geocode over 70,000 families enrolled in the Federal Program of the Unique Registry in Campinas. My responsibility included analyzing sensitive data comprising more than 170 variables using R. This initiative significantly enhanced our comprehension of areas with social vulnerabilities through spatial visualization, yielding valuable insights for policymakers and third-sector organizations.I devised and implemented a replicable workflow in R specifically tailored for the Unique Registry data. This involved creating an R package (RefineGeo) that streamlined the geocoding process used within the study. The primary objective was to cleanse and prepare the data, simplifying the process for other researchers to conduct more effective geocoding, particularly in regional studies focusing on social vulnerability.Collaboratively, I worked alongside analysts at the FEAC Foundation to conduct a comprehensive methodological study covering the outcomes and techniques employed in the geocoding process of the Unique Registry in Campinas.Consistently, I managed workflow activities encompassing commits, code reviews, and data manipulation to extract pertinent insights as requested by the lead researcher. | | | |

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| Teaching Assistant | <u>Pontifical Catholic University of Campinas</u> | <i>Campinas, SP, Brazil</i> | 02/2023 - 12/2023 |
| <ul style="list-style-type: none">Developed instructional YouTube tutorials to help students grasp course content and provided support with the R language.Design exercises, quizzes, and answer keys for students while being responsible for grading assignments.Conduct continuous online tutoring sections during the semester to assist students with course-related topics. | | | |

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| Research Assistant | <u>Pontifical Catholic University of Campinas</u> | <i>Campinas, SP, Brazil</i> | 03/2022 - 12/2022 |
| <ul style="list-style-type: none">Responsible for collecting, extracting, and validating data from international trade for the Metropolitan Region of Campinas in the R language.Developed an automated RMarkdown workflow for running monthly reports on the International Trade of Metropolitan Region of Campinas (MRC), reducing the time required for releasing information to local media and public institutions.Conducted methodological studies involving statistical and economic analysis on topics with regional significance, aiming to provide better insights and understanding to policymakers, third-sector organizations, and the industry sector.Collaborated on data wrangling tasks, addressing specific requests by the leading researcher. | | | |

Education

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| Bachelor of Economics | <u>Pontifical Catholic University of Campinas</u> | <i>Campinas, SP, Brazil</i> | 08/2018 - 12/2023 |
| <ul style="list-style-type: none">Main Subjects: Statistics, Econometrics, Spatial Econometrics, GIS, ESDA, Macroeconomics, Public PolicyThesis Paper: Determinants of Crime in Brazilian Southeast: Applications of Spatial Econometrics Techniques | | | (12/2023) |

Projects

- [Geocoding Study](#): Methodological Process and Results of Geocoding in the Campinas Single Registry Program **(10/2023)**
- [Monthly International Trade Report](#): Automated Report of International Trade in the MRC **(11/2022)**
- [Instructor](#): Two-Day Workshop of Geocoding and Map Making with R in the University's Academic Week **(10/2023)**
- [Commodity PCA Analysis – Plotly](#): Commodities data analysis with PCA and Plotly applications **(12/2023)**
- [RefineGeo](#): R Package about the cleaning process and methodology used in the Single Registry geocoding process **(12/2023)**

Certificates

- [Data Science With R DataCamp](#): An 88h course that contemplates Data Science With R **(11/2022)**
- [Data Analyst in SQL DataCamp](#): An 39h course that contemplates Data Analysis With SQL **(02/2023)**
- [CPA-10](#): Certificate from ANBIMA about Brazilian Financial Market **(10/2023)**
- [Data Analyst in Power BI](#): An 48h course that contemplates Data Analysis in Power BI **(01/2024)**

Others

- [Award](#): Participant in the international tournament for the business simulation CESIM, representing the University **(04/2023)**
- [Award](#): Won 3th prize among 24 teams in the business simulation CESIM competition organized by the University **(11/2022)**