# Felipe Santos-Marquez

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#### EDUCATION

#### Nagoya University

Nagoya, Aichi, Japan

M.S. in Development Economics, GPA: 90/100

2019-2021

- Thesis: "Achieving Peace and the SDGs in Colombia: Municipal Convergence, Crime, and the Role of Conditional Cash Transfers"

## The National University of Colombia

Bogota, Colombia

B.S. in Physics, GPA: 4.0/5.0

2007-2012

#### EXPERIENCE

## Nagoya University

Nagoya, Aichi, Japan 04/2020- present

Research Assistant at the QuaRCS lab

- Creation and Maintenance of databases
- Creating shapefiles and data-sets of income and well-being related variables across the world, and Sustainable Development Goals data for Bolivia

#### Nagoya University

Nagoya, Aichi, Japan

Academic Tutor at the Graduate School of International Development

09/2019- present

- Tutoring of research, Master's and PhD students
- Helping students to organize research data and to analyze it using a variety of econometric methods and software

#### National University of Colombia

Bogota, Colombia

Mathematics (Topology and Analysis) tutor at the School of Mathematics, Faculty of Science

01/2008- 07/2008

- Tutoring of physics undergraduate students
- Preparing and facilitating tutoring workshops and academic support sessions for small groups of students

#### TEACHING

• Teaching Assistant at Nagoya University GSID Open Webinar Series and Spanish 4 fall 2020

• English Teacher at Alive English School, Nagoya city, Japan Preschool, elementary and secondary classes

04/2017 - present

#### **PUBLICATIONS**

- [1] **F. Santos-Marquez**, A. B. Gunawan, and C. Mendez, "Regional income disparities, distributional convergence, and spatial effects: Evidence from indonesian regions 2010–2017", *GeoJournal*, pp. 1–19, 2021, Available at https://doi.org/10.1007/s10708-021-10377-7.
- [2] C. Mendez and **F. Santos-Marquez**, "Regional convergence and spatial dependence across subnational regions of asean: Evidence from satellite nighttime light data", Regional Science Policy & Practice, 2020, Available at https://doi.org/10.1111/rsp3.12335.

[3] **F. Santos-Marquez** and C. Mendez, "Regional convergence, spatial scale, and spatial dependence: Evidence from homicides and personal injuries in colombia 2010-2018", Regional Science Policy & Practice, 2020, Available at https://doi.org/10.1111/rsp3.12356.

## WORKING PAPERS

- 1. Dominguez, Alvaro and Mendez, Carlos and Santos-Marquez, Felipe, Sectoral Productivity Convergence, Input-Output Structure and Network Communities in Japan (August 23, 2020). Available at SSRN: https://ssrn.com/abstract=3679429 or http://dx.doi.org/10.2139/ssrn.3679429
- 2. **F. Santos-Marquez** "Spatial Beta-Convergence Forecasting Models: Evidence from Municipal Homicide Rates in Colombia" 2020 //jsla-2020.netlify.app/

#### Conference Presentations

• Applied Regional Science Conference Saga University, Saga, Japan November-2019

• Bolivian Conference on Development Economics La Paz, Bolivia (online conference) August-2020

• 57th Conference of the Japan Society of Social Science on Latin America Japan (online conference)

November-2020

#### EXTRACURRICULAR AND ACADEMIC ACTIVITIES

• Data@ANZ ANZ virtual experience Program

August-2020

Completed two practical task modules in

Exploratory Data Analysis Predictive Analytics.

• DataCamp courses- completed over 10 online courses in:

2019 - 2020

Introduction to Machine Learning.

Multiple and Logistic Regressions in R.

Cluster Analysis in R

Supervised Learning in R: Regression

Supervised Learning in R: Classification

Unsupervised Learning in R

Spatial Analysis with sf and raster in R.

Visualizing Geospatial Data in R

Forecasting in R

Working with Web Data in R

#### SKILLS

• Software & code: GitHub, Geoda, Matlab and C++

• Statistical software: R, Python and Stata

# STATISTICAL AND ECONOMETRIC METHODS ACTIVELY USED ON RESEARCH

• Exploratory Data Analysis

R -Python -Geoda

• Exploratory Spatial Data Analysis

R –Python –Geoda

• Linear, Logistic, Spatial and Spatially Weighted Regressions  $\mathbf{R}$ Spatial Visualizations & Geospatial Data Manipulation R - Python Synthetic Control Methods  $\mathbf{R}$ Bayesian Model Averaging  $\mathbf{R}$ • Hierarchical, k-means, max-p and other Clustering Algorithms R -Geoda R • Exponential Smoothing, ARIMA models and other Forecasting Methods Time Series Analysis: Club Convergence Algorithms R-Stata Long-run Filtering and Spatial Filtering  $\mathbf{R}$ 

# CODING TUTORIALS, CODE SAMPLES & DATASETS

• Local Moran's I and Spatial Scales (using R and tmap)

rpubs.com/FelipeSantos/LISA\_tmap\_geoda

• Using the missForest Package (inputting NA data using random forests) rpubs.com/FelipeSantos/na\_missforest

• Global Economic Convergence Using the Tidyverse

rstudio.cloud/project/650923

• Socio-Economic convergence in Colombia Using the REAT package

rstudio.cloud/project/352478t

• Slides and Presentations for conferences - created in R (xargian package) github.com/jfsantosm/BCDE2020-slides

• Private website (generated using Github, R and Netlify)

github.com/jfsantosm/academic-felipe-august2020

felipe-santos.rbind.io/

 Data-set of municipal crime in Colombia and exploratory data Analysis in R github.com/jfsantosm/Regional-Crime-Data-Colombia

#### LANGUAGES

Spanish: Native speaker levelEnglish: High proficiency levelJapanese: Intermediate level