

Nicolás Suárez Chavarría

Curriculum Vitae

579 Jane Stanford Way,
Stanford, CA, USA
☎ +1 (650) 788 9447
✉ nsuarez@stanford.edu
🌐 [nicolas-suarez](#)

Education

- 2019 - Present **Stanford University, Ph.D. in Economics**, Admitted to candidacy.
2017 - 2018 **Universidad de Chile, M.Sc. in Economics**, Graduated with the highest honors.
2012 - 2017 **Universidad de Chile, Business Engineering**, Graduated with the highest honors.
2012 - 2015 **Universidad de Chile, B.Sc. in Economics**, Graduated with the highest honors.

Published Papers

- 2019 **[Inequality in social capital in Chile: Assessing the importance of network size and contacts' occupational prestige on status attainment process](#)**, *With Dante Contreras, Juan Díaz and Gabriel Otero, Social Networks*, Volume 58, July 2019, pages 59-77.

Working Papers

- 2021 **[Classroom composition and network effects: Evidence from a college special admission program in Chile](#)**.
2021 **[Predicting Ground-Level Ozone Concentration from Urban Satellite and Street-Level Imagery using Multimodal CNN](#)**, *With Andrea Vallebuena and Nina Prakash*, CS230 class project, selected as an [Outstanding project](#) for the Winter 2021 quarter. [Code available here](#) 🌐.
2018 **[The impact of commuting time over educational achievement: A machine learning approach](#)**, *With Dante Contreras, Daniel Hojman, Patricio Rodríguez and Manuel Matas*, Working document number 472, Department of Economics, Universidad de Chile.

Work in progress

- 2022 **[Understanding the roles of National and Precolonial Institutions in African development using CNNs](#)**, *With Pascaline Dupas and Zhongyi Tang*.

Other relevant projects

- 2021 **[Optimized Regression Discontinuity Application: the effect of national institutions over local development](#)**, [Code available here](#) 🌐.
2021 **[Tutorial: Landsat-8 image download and visualization using Google Earth Engine and Python](#)**, [Code available here](#) 🌐.

Undergraduate Teaching Experience

- Spring 2018 **Introduction to Economics**, at *Universidad de Chile*.
Fall 2018 **Introduction to Microeconomics**, at *Universidad de Chile*.

Research Assistant Experience

- June 2020- Present **With Prof. Pascaline Dupas, at Stanford University.**
- We are studying the impact of national institutions over local levels of development in Africa, using satellite imagery and Convolutional Neural Networks (CNN) to predict infrastructure in Africa at a very granular level, and then we use a Regression Discontinuity Design to see the effect of national institutions over several development level outcomes, including night light levels, population density, access to electricity, water and sewerage systems.
- March 2017- Dec. 2018 **With Prof. Dante Contreras, at Universidad de Chile.**
- I surveyed literature, built datasets, made calculations and estimated models to measure the impact of commuting time over academic performance.
- Jan. 2017, Jan. 2018 **With Prof. Daniel Hojman, at Universidad de Chile.**
- I built large databases and computed indexes and measures of segregation.
- Dec. 2014 - Jan. 2016 **With Prof. Valentina Paredes, at Universidad de Chile.**
- I built datasets and estimated econometric models to study the impact of the gender composition of a classroom over the decision of women to major in a STEM-related discipline

Teaching Assistant Experience

Graduate courses (M.Sc. in Economics, Universidad de Chile):

- Spring 2018 **Macroeconomics II**, *prof. Eduardo Engel.*
- Spring 2018 **Microeconomics II**, *prof. Juan Pablo Torres-Martínez.*
- Spring 2017 **Microeconomics II**, *prof. Juan Pablo Torres-Martínez.*
- Fall 2017 **Microeconomics I**, *prof. Juan Pablo Torres-Martínez.*

Undergraduate courses (Stanford University):

Spring 2022 **Principles of Economics**, *prof. Pascaline Dupas.*

Undergraduate courses (Business Engineering, Universidad de Chile):

- Spring 2017 **Quantitative Methods IV**, *prof. Esteban Puentes.*
- Spring 2014 **Political Economy**, *prof. Óscar Landerretche, T.A. Coordinator.*
- Fall 2014 **Political Economy**, *prof. Óscar Landerretche.*
- Fall 2014 **Intermediate English I**, *prof. Carolina Pérez.*
- Spring 2013 **Basic English**, *prof. Vassil Apostolowski.*

Working Experience

- July 2018- August 2019 **Department of Economics, Universidad de Chile, Instructor.**
- I taught undergraduate courses.
 - I was in charge of measuring and researching about the productivity of the faculty.
- Dec. 2015- April 2016 **Chile 21 Foundation, Junior Economist.**
- I analyzed and modeled data about dock workers in Chile, in order to study the job quality gaps among dock workers.

Scholarships and Sponsorships

- 2019 **COES Sponsorship**, *COES Graduate Sponsorship program, Centre for Social Conflict and Cohesion Studies (COES).*
- 2017 **National Master's Scholarship**, *Advanced Human Capital Formation Program, National Commission of Research in Science and Technology (CONICYT).*
- 2017 **M.Sc. in Economics' Academic Excellence Scholarship**, *Department of Economics, Universidad de Chile.*
- 2012-2016 **Universidad de Chile Scholarship**, *Universidad de Chile, undergraduate studies scholarship.*

Academic Awards

- 2019 **Best Graduated in Economics**, School of Economics and Business, Universidad de Chile, Award handed by the School of Economics and Business to the student with the highest GPA among the M.Sc. in Economics who graduated in 2018..
- 2019 **Membership in The Beta Gamma Sigma International Business Honor Society**, School of Economics and Business, Universidad de Chile, Membership awarded in recognition of high scholastic achievement.
- 2018 **School Spirit Award**, School of Economics and Business, Universidad de Chile, Award handed by the Alumni association to one student with an outstanding academic performance, who also worked in extracurricular activities that had a positive impact over the community.
- 2017 **Winner of the COES Conference Academic Poster Contest**, Centre for Social Conflict and Cohesion Studies (COES) Conference, Viña del Mar, Chile.
- 2015-2017 **Honor Board**, School of Economics and Business, Universidad de Chile, Awarded to students in the first percentile of academic performance.
- 2013-2014 **Circle of Excellence**, School of Economics and Business, Universidad de Chile, Awarded to students in the first 5 percentiles of academic performance.

Conferences and seminars

- 2018 **Internal Seminars of the Department of Economics**, Universidad de Chile, “The impact of commuting time over educational achievement: A machine learning approach”.
- 2017 **Poster Presenter at the Centre for Social Conflict and Cohesion Studies (COES) Conference**, Universidad Adolfo Ibáñez, Viña del Mar, Chile, “Labor market and social networks: New evidence from Chile”.
- 2017 **Poster Presenter at the Society of Chilean Economists (SECHI) Conference**, Universidad de Talca, Santa Cruz, Chile, “Labor market and social networks: New evidence from Chile”.

Programming skills

AT_EX, *advanced level*.

Stata, *advanced level*.

MATLAB, *intermediate-advanced level*.

Python, *experience with machine learning, data manipulation, social networks and webscrapping packages*.

R, *beginner-intermediate level, experience with GIS packages*.

SQL, *beginner level*.

TensorFlow, *beginner level*.

Pytorch, *beginner level*.

Google Cloud, *basic experience with cloud computing and usage of the Google Maps and StreetView APIs*.

Google Earth Engine, *basic experience working with satellite images*.