



MARIA IGNACIA VICUÑA
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I. EDUCATION

- Ph.D. in Statistics, Pontificia Universidad Católica de Chile 2011 - 2015
- M.Sc. in Statistics, Pontificia Universidad Católica de Chile 2009 - 2010
- Bachelor Degree in Mathematics, Pontificia Universidad Católica de Chile 2004 - 2008

II. ACADEMIC POSITIONS

- Associate Teaching Professor, School of Management,
Pontificia Universidad Católica de Chile. 2024 – To date
- Assistant Teaching Professor, School of Management UC 2015 - 2024
- Professor for Undergraduate Statistics
Pontificia Universidad Católica de Chile 2012 - 2013
- Professor, Engineering Department, Universidad Adolfo Ibáñez. 2010 - 2012

III. AREA OF SPECIALIZATION AND MAIN COURSES

- Area: Statistics
- Main Courses: Probability and Statistics, Statistic Inference, Quantitative Methods.

IV. RESEARCH

Recent Publications

- Q Quiroga, B., Vásquez, C., & Vicuña, M. I. (2022). Nonlinear time-series forecasts for decision support: Short-term demand for ICU beds in Santiago, Chile, during the 2021 COVID-19 pandemic. *International Transactions in Operational Research*, 30(6), 3400-3428.
- Vicuña, M. I., Vásquez, C., & Quiroga, B. F. (2021). Forecasting the 2020 COVID-19 epidemic: A multivariate Quasi-Poisson regression to model the evolution of new cases in Chile. *Frontiers in public health*, 9, 416.
- Vicuña, M.I., Palma, W. & Olea, R. (2019). Minimum distance estimation of locally stationary moving average processes. *Computational Statistics & Data Analysis*, 140:1-20. (WoS)

Working Papers



- "A model to measure agreement between an integer valued instrument and multiple evaluations with an ordered categorical instrument"

V. SELECTED SCIENTIFIC PRESENTATIONS

- XI Latin American Congress of Statistics Societies
Title: "Estimador de Mínima Distancia para Procesos Localmente Estacionarios" (Part of Doctoral thesis) Oct 2014
- Internship at Universidad de Supelec, Paris, Francia.
Research with con Pascal Bondon, regarding ARFIMA models Locally Stationary with structural changes in the long term memory parameters. Feb 2013

VI. CONSULTING EXPERIENCE

- MINEDUC (Ministry of Education) 2012 – 2014
- Central Bank of Chile 2012
- National Health Survey

VII. GRANTS AND AWARDS

- National Conicyt Scholarship for PhD Studies 2011 - 2015
- Maximum Grade Distinction, PhD in Statistics 2015
- Maximum Grade Distinction, Master in Statistics 2010
- National Conicyt Scholarship for Master Studies 2009 - 2010
- Faculty of Mathematics Scholarship
- Graduated 2nd of 36 students, Bachelor Degree in Mathematics
- Graduated in 1st place, Master in Statistics