6550 El Colegio Rd., Apt 5104 Santa Barbara, CA 93106 e-mail: zapata@pstat.ucsb.edu

RESEARCH INTERESTS Statistics, Machine Learning, Information Theoretic Learning, High-Dimensional Statistics, Graphical Models

EDUCATION

University of California, Santa Barbara

Santa Barbara, CA 2015-Current

PhD in Statistics and Applied Probability (GPA: 3.94) Advisor: Sang-Yun Oh

University of Chile

Santiago, CHILE

Industrial Engineer (Final Grade: 7.0/7.0)

2005-2011

& Bachelor of Engineering Science in Industrial Engineering

Dissertation Title: "Stability Analysis of Credit Ratings Applied to Synthetic CDOs"

PROFESSIONAL SimpliRoute

Mountain View, CA

EXPERIENCE

Data Scientist - Intern

July 2017 - September 2017

• Developed data mining tools to analyze delivery planning data.

Ministry of Finance, Sovereign Wealth Funds (SWF)

Santiago, CHILE

International Finance Analyst

2013 - 2015 the SWFs and its

- Performed quantitative analyses for the investment policy of the SWFs and its financial investment committee.
 - Analyzed the optimal size of the Pension Reserve Fund's investment portfolio (US\$5.8 billion)
 - Developed a Vector Auto Regressive asset allocation model for the Economic and Social Stabilization Fund (US\$15 billion)
- Reduced operational risk of SWFs' by developing an information database system for reports and data analysis.

Center of Finance, University of Chile

Santiago, CHILE

Research Scientist, Advisor: Arturo Cifuentes.

2011

- Conducted Monte Carlo simulation studies on credit ratings and synthetic CDOs.
- Developed a methodological framework to implement a real estate index for the Chilean housing market.

Fischer & Zabala (Financial asset manager)

Santiago, CHILE

Part-time Quantitative Financial Analyst

2012

- Developed a credit risk model for a complex financial mortgage-backed security deal (US\$60 million) for the Chilean pension funds. The model was used to structure the fund and test its investment guidelines.
- Participated actively in roadshow meetings by addressing quantitative questions of potential investors.
- Responsible for daily monitoring of two high-yield fixed income funds.

JOURNAL AND CONFERENCE PAPERS

(1) J.Zapata and A. Cifuentes. "On the Stability of Synthetic CDO Credit Ratings". (Link: http://onlinelibrary.wiley.com/doi/10.1111/infi.12086/abstract)

(2) J.Zapata and A. Cifuentes. "Dissecting Abacus: Risks That Investors Should Have Seen". Accepted for Presentation In: Macrotheme Finance and Investments Conference in Paris, 2012.

TEACHING

University of California, Santa Barbara

Santa Barbara, CA

Department of Statistics and Applied Probability Teaching Assistant

2015-Current

- PSTAT 109 Statistics for Economics
- PSTAT 120A Introduction to Probability
- PSTAT 160B Applied Stochastic Processes
- PSTAT 170 Introduction to Mathematical Finance
- PSTAT 174/274 Time Series
- PSTAT 131/231 Data Mining

University of Chile

Santiago, CHILE

Department of Industrial Engineering, School of Engineering

2009 - 2011

• Financial Management, Marketing Engineering, Operations Engineering courses

HONORS & AWARDS

University of Chile

Santiago, CHILE

Industrial Eng. Department, School of Engineering

 \bullet Summa Cum Laude Graduated & Ranked 1st in the class of 2012

2012

• Best Heuristic Algorithm of the Class

Fall 2010

• Best Teaching Assistant Award ("Ayudante Destacado")

2010

• Dean's List ("Alumno Destacado")

2006 - 2011

COMPUTER SKILLS

R, Python, C/C++, SQL, Matlab, Visual Basic, Microsoft Office