UW-Madison, Department of Statistics 1300 University Ave, Madison, WI, 53706 (608) 262-6058 alejandra.quintos@wisc.edu alejandraquintos.com

# **ALEJANDRA QUINTOS**

### EMPLOYMENT AND EDUCATION

University of Wisconsin-MadisonMadison, WIAssistant Professor – Department of StatisticsAug. 2022 – Present

Columbia UniversityNew York, NYPh.D. in Statistics – Advisor: Philip ProtterSep. 2016 – Jul. 2022M.Phil. in StatisticsSep. 2016 – Feb. 2020M.A. in StatisticsSep. 2016 – May 2018

Universidad de las Américas Puebla Puebla, Mexico B.S. in Actuarial Science – Valedictorian, Summa Cum Laude, GPA: 9.9/10.0 Aug. 2010 – Jun. 2015

## **FELLOWSHIPS**

University of Wisconsin-MadisonMadison, WINellie McKay FellowshipAug. 2022

Columbia UniversityNew York, NYDean's FellowshipSep. 2016

Fulbright – COMEXUSMexico City, MexicoFulbright García-Robles Fellowship for Columbia UniversityJun. 2015Proyecta 100 Mil Grant for Research Stay at Cornell UniversityJun. 2014

Universidad de las Américas Puebla, Mexico
Outstanding Student Scholarship

Jun. 2010

## RESEARCH INTERESTS

Probability Theory, Applied Probability Theory, Stochastic Processes, Mathematical Finance, Credit Risk Theory, Microfinance, Statistics, Machine Learning.

## **PUBLICATIONS**

- 1. P. Protter, **A. Quintos**, "Stopping Times Occurring Simultaneously", 2022. Available online: https://arxiv.org/abs/2111.09458
- 2. R. Jarrow, P. Protter, **A. Quintos**, "Computing the Probability of a Financial Market Failure: A New Measure of Systemic Risk", *Annals of Operations Research*, (2022). https://doi.org/10.1007/s10479-022-05146-9
- 3. P. Protter, **A. Quintos**, "Optimal group size in microlending", *Annals of Finance*, 18, 121–132 (2022). https://doi.org/10.1007/s10436-020-00382-0
- 4. **A. Quintos**, G. Romero-Meléndez, "Fractal modeling of poverty indicators in the state of Puebla", Universidad de las Américas Puebla, 2014. *Available upon request*.

5. **A. Quintos**, "New Regulation in the Mexican Insurance Market", SC Johnson Graduate School of Management at Cornell University, 2014. *Available upon request*.

## **REFEREE**

SIAM Journal on Financial Mathematics (SIFIN) Annals of Operations Research (ANOR)

## **INVITED & CONTRIBUTED TALKS**

- University of Waterloo, Young Talents in Actuarial Science and Quantitative Finance, Waterloo, Ontario, Canada, Apr. 2023.
- Purdue University, Research Colloquium-Department of Statistics, West Lafayette, IN, Feb. 2023.
- Queen's University, Department of Mathematics and Statistics Colloquium, Kingston, Ontario, Canada, Feb. 2023
- Rutgers University, 6th Eastern Conference on Mathematical Finance, New Brunswick, NJ, Oct. 2022.
- University of Wisconsin-Madison, *Mathematics Colloquium*, Madison, WI, Sep. 2022.
- Institute of Mathematical Statistics, 2022 IMS Annual Meeting, London, England, Jun. 2022. (Chair of Risk, Insurance and Finance Session)
- Columbia University, Minghui Yu Memorial Conference, New York, NY, May 2022.
- Purdue University, Probability Seminar, West Lafayette, IN, Apr. 2022.
- Columbia University, 2022 Graduate Research Symposium of Women in Science, New York, NY, Apr. 2022.
- New York University, Brooklyn Quant Experience Lecture Series, Brooklyn, NY, Feb. 2022.
- Rice University, Department of Statistics Seminar, Houston, TX. Feb. 2022
- New York University, Department of Technology, Operations, and Statistics Seminar, New York, NY. Feb. 2022
- Cornell University, School of Operations Research and Information Engineering Seminar, Ithaca, NY. Feb. 2022
- Carnegie Mellon University, Department of Statistics and Data Science, Pittsburgh, PA. Jan. 2022.
- University of California, Riverside, *Department of Statistics Seminar*, Riverside, CA. Jan. 2022.
- University of Wisconsin-Madison, Department of Statistics Seminar, Madison, WI. Jan. 2022.
- University of Minnesota-Twin Cities, School of Statistics Seminar, Minneapolis, MN, Dec. 2022.
- Federal Reserve Bank of Philadelphia, *Young Scholars Conference on Machine Learning in Economics and Finance*, Philadelphia, PA, Dec. 2021.
- Columbia University, Statistics Department Student Seminar, New York, NY, Dec. 2021.
- CUNY, 20th Northeast Probability Seminar, New York, NY, Nov. 2021.
- Columbia University, Stochastic Processes and Applications, Invited lecturer, New York, NY, Sep. 2021.
- Columbia University, Research and Diversity Graduate Student Panel, New York, NY, Sep. 2021.
- Columbia University, *Undergraduate Research Experiences in Mathematical Modeling*, New York, NY, Jun. 2021.

- Universidad de las Américas Puebla, 32nd National Congress on Actuarial Sciences, Puebla, México, Apr. 2021.
- Columbia University, Minghui Yu Memorial Conference, New York, NY, Mar. 2021.
- Columbia University, Minghui Yu Memorial Conference, New York, NY, Apr. 2019.
- Universidad de las Américas Puebla, 30th National Congress on Actuarial Sciences, Puebla, México, Mar. 2019.

## **AWARDS**

- Columbia University, *Howard Levene Outstanding Teaching Award*, May 2022.
- Columbia University, *Presidential Award for Outstanding Teaching by a Graduate Student Instructor*, Finalist, Feb. 2022.
- Columbia University, 3-Minute Thesis (3MT) Competition, Audience Choice Award, Feb. 2022.
- Columbia University, *Presidential Award for Outstanding Teaching by a Graduate Student Instructor*, Finalist, Feb. 2021.
- Universidad Popular Autónoma de Puebla, *Probability and Statistics Olympiad*, 1st place, Nov. 2014.
- Universidad de las Américas Puebla, UDLAP Scholar (Highest GPA in Sciences School), Oct. 2014.
- Consejo de Ciencia y Tecnología del Estado de Puebla, *Tercer Encuentro Estatal de Jóvenes Investigadores* (State Research Competition), 2nd place, Oct. 2014.
- Universidad Popular Autónoma de Puebla, *Probability and Statistics Olympiad*, 1st place, Nov. 2013.
- Universidad Popular Autónoma de Puebla, *Probability and Statistics Olympiad*, 1st place, Nov. 2012.

## **TEACHING & MENTORING**

#### **University of Wisconsin-Madison**

Assistant Professor – Department of Statistics

Madison, WI Aug. 2022 – Present

- Stochastic Processes in Finance (STAT 992) Topics class for Ph.D. students
- Introduction to Theory and Methods of Mathematical Statistics I (STAT 312)

#### **Columbia University**

New York, NY Sep. 2016 – May 2022

Teaching Assistant – Department of Statistics

- Stochastic Processes and Applications (Graduate level)
- Elementary Stochastic Processes (Undergraduate level)
- Probability (Graduate level)
- Statistical Inference (Graduate level)
- Calculus-based Introduction to Statistics (Undergraduate level)
- Applied Linear Regression Analysis (Undergraduate level)

Directed Reading Program Mentor – Department of Mathematics

Sep. 2021 – Dec. 2021

• Read and discuss probability research articles with an undergraduate student

Research Mentor – Undergraduate Research Experiences in Mathematical Modeling Jun. 2021 – Aug. 2021

• Supervised 2 teams of 3 undergraduate students on interdisciplinary research projects:

- Alzheimer's brain in a network diffusion model
- o Discrete-event market simulation of the Figgie card game
- Helped mentees to understand methods of research and scholarship
- Trained students in mathematical and statistical skills

## LEADERSHIP & OUTREACH

- Member, Committee on Diversity, Equity and Inclusion, Statistics Department, Columbia University, New York, NY, Sep. 2021 Jul. 2022.
- Co-organizer, *Networking Meetings for Women*, Statistics Department, Columbia University, New York, NY, Jan. 2020 Jul. 2022.
- Speaker, *Finding Strength in the Numbers: Growing Up Stories*, Women in Mathematics and Statistics, Columbia University, New York, NY, Apr. 2022
- Statistics Department Representative, *The 2021 SACNAS National Diversity in STEM*, Digital Conference, Oct. 2021.
- Speaker, *Ph.D. Information Session for M.A. Students*, Statistics Department, Columbia University, New York, NY, Oct. 2021.
- Host & Co-organizer, *Women in STEM Panel*, Undergraduate Research Experiences in Mathematical Modeling, Columbia University, New York, NY, Aug. 2021.
- Member, *Healthy Living Civic Engagement Project*, The Washington Center for Internships and Academic Seminars, Washington, DC, Feb. 2014 May 2014.
- Mentor, *High School Finance Course*, Auxiliémos La Familia (non-profit organization), Puebla, Mexico, Aug. 2013 Jan. 2014.

### PROFESSIONAL EXPERIENCE

#### Citigroup – Banamex

Puebla, Mexico

Compliance Analyst – Anti Money Laundering

Jun. 2015 – Sep. 2015

• Developed novel risk models to detect and report activities linked to money laundering.

#### Cornell University – SC Johnson Graduate School of Management

Ithaca, NY

Research Intern – Advisors: Prof. Lourdes Casanova and Richard Coyle

Jun. 2014 – Aug. 2014

• Conducted research on new regulations in the Mexican insurance market.

## **American Association for Marriage and Family Therapy**

Alexandria, VA

Policy Intern

Feb. 2014 – May 2014

• Estimated the organization's pure premiums and assisted them in Congress Meetings on Capitol Hill.

## **CERTIFICATIONS & PROGRAMS**

- Society of Actuaries, Exam P: Probability, Jan. 2014.
- Society of Actuaries, Exam FM: Financial Mathematics, Aug. 2013.
- The Washington Center for Internships and Academic Seminars, *Business and Global Trade Program*, Washington, DC, Jan. 2014 May 2014.
- The Anglo Mexican Foundation, *Teacher Training Course English language teaching methodology*, Puebla,

## **SKILLS**

- Programming: R, LaTeX, VBA, C#, Python, Mathematica.
- Applications: Minitab, EViews, Microsoft Office (Access, Excel, Word, PowerPoint, Publisher).

# **OTHER**

- Languages: Spanish (native), English (near-native fluency).
- Hobbies: Marathon running, swimming, hiking.