Columbia University, Department of Statistics
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ALEJANDRA QUINTOS

EDUCATION

Columbia University New York, NY
Ph.D. in Statistics – Advisor: Philip Protter Sep. 2016 – May 2022 (expected)
M.Phil. in Statistics Sep. 2016 – Feb. 2020
M.A. in Statistics Sep. 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

Columbia University New York, NY
Dean's Fellowship Sep. 2016

Fulbright – COMEXUS Mexico City, Mexico
Fulbright Garcia-Robles Fellowship for *Columbia University* Jun. 2015
Proyecta 100 Mil Grant for Research Stay at *Cornell University* Jun. 2014

Universidad de las Américas Puebla Puebla, Mexico
Outstanding Student Scholarship Jun. 2010

RESEARCH INTERESTS

Mathematical Finance, Credit Risk Modeling, Stochastic Processes, Multivariate Cox Processes, Microfinance.

PUBLICATIONS

1. R. Jarrow, P. Protter, **A. Quintos,** "Computing the Probability of a Financial Market Failure: A New Measure of Systemic Risk", 2021. Working paper

2. P. Protter, **A. Quintos,** "Dependent Stopping times", 2021. Working paper

3. P. Protter, **A. Quintos,** "Optimal group size in microlending", *Annals of Finance*, 2021. https://doi.org/10.1007/s10436-020-00382-0

4. **A. Quintos,** "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)

INVITED & CONTRIBUTED TALKS

- Rutgers University, *5th Eastern Conference on Mathematical Finance*, New Brunswick, NJ, Oct. 2022.
- Columbia University, *Stochastic Processes and Applications*, Invited lecturer, New York, NY, Sep. 2021.
- Columbia University, *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, *32nd National Congress on Actuarial Sciences*, Puebla, México, Mar. 2019.

AWARDS

- 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)*, Second 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

Columbia University   New York, NY
Teaching Assistant – Statistics Department   Sep. 2016 – Present

- 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 – Mathematics Department   Sep. 2021 – Present

- 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 projects:
  - Alzheimer's brain in a network diffusion model
  - 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 – Present.

- Co-organizer, *Networking Meetings for Women*, Statistics Department, Columbia University, New York, NY, Jan. 2020 – Present.

- 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 regulation 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 Probability*, 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, Mexico, Aug. 2009 – May 2010.

SKILLS

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

OTHER

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