Columbia University, Department of Statistics 1255 Amsterdam Ave, #1005, New York, NY 10027 (646) 318-8254 a.quintos@columbia.edu alejandraquintos.com

ALEJANDRA QUINTOS

EDUCATION

Columbia UniversityNew York, NYPh.D. in Statistics – Advisor: Philip ProtterSep. 2016 – May 2022 (expected)M.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

Columbia UniversityNew York, NYDean's FellowshipSep. 2016

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

Universidad de las Américas PueblaPuebla, MexicoOutstanding Student ScholarshipJun. 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. Preprint
- 2. P. Protter, A. Quintos, "Dependent Stopping times", 2021. Preprint
- 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

Teaching Assistant – Statistics Department

New York, NY 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

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- 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.

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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

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