

Daniel Eduardo Rigobon

CONTACT INFORMATION

201 Hibben Magie Rd
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EDUCATION

Princeton University, Princeton, NJ

Candidate for Ph.D. in ORFE, 2018-Present

- Relevant Coursework: Probability in High Dimensions, Stochastic Calculus, PDE Methods for Financial Mathematics.
- Research Interests: Network Identification, Dynamical Networked Systems, Network Control and Optimization, Systemic Risk.
- Cumulative GPA: 3.97

Massachusetts Institute of Technology, Cambridge, MA

B.S. Mechanical Engineering, June 2018

- Minors in Economics, Statistics
- Thesis: *Models of Entrainment of Human Walking*
- Cumulative GPA: 4.8

Weston High School, Weston, MA

EDUCATION EXPERIENCE

Princeton University

Assistant in Instruction for ORF536 (Probability Theory)

Sep. 2019 - Jan. 2020

Assistant in Instruction for ORF387 (Networks)

Feb. 2020 - May 2020

Assistant in Instruction for ORF455 (Energy and Commodity Markets)

Sep. 2020 - Present

RESEARCH EXPERIENCE

Princeton University

Ph.D. Student

2018 - Present

- Studying the optimization of network structures to drive consensus-forming.
- Studying models of systemic risk propagation in financial networks.
- Proposing a novel Network Identification project to estimate networked systems.
- Explored criticality of mean-field interacting particle system.

State Street Associates

Portfolio Risk and Research Intern

Summer 2020

- Established a relationship between centrality of global financial institutions and volatility.
- Communicated findings to clients through monthly newsletters and short research summaries.
- Contributed to new group mentorship and sponsorship programs in State Street's Global Markets Division.

MIT Media Lab

Research Assistant in 'Human Dynamics'

2017-2018

- Analyzed network game data in Python to study effects of social influence.
- Participated in the 'Fragile Families Challenge' of predicting out-of-sample outcomes from social science data using machine learning and data science methods.

- Trained Convolutional Neural Nets on Satellite Imagery to improve targeting of conditional cash transfer programs in Mexico City.

Newman Biomechanics Laboratory

Undergraduate Research Assistant

2016-2018

- Developed an energy-based controller to replicate experimental entrainment behavior in human walking.
- Submitted findings for publication and presentation at ASME DSCC 2017.

HONORS AND AWARDS

President's Fellowship, Princeton University; 2018

John C. and Elizabeth J. Chato Award, MIT; 2018

Member of Pi Tau Sigma, MIT; 2017-2018

AMP Inc. Award, MIT; 2016

PUBLICATIONS

B. Jiang, D. Rigobon, R. Rigobon; *From "Just in Time" to "Just in Case": Simple Models of Global Supply Chains and Aggregate Shocks*; Working Paper.

M. Salganik et al.; *Measuring the Predictability of Life Outcomes with a Scientific Mass Collaboration*; Proceedings of the National Academy of Sciences; 2020.

D. Rigobon, E. Jahani, Y. Suhara, K. AlGhoneim, A. Alghunaim, A. Pentland, A. Almaatouq; *Winning Models for GPA, Grit, and Layoff in the Fragile Families Challenge*; Socius: Sociological Research for a Dynamic World; 2019.

D. Rigobon; *Models of Entrainment of Human Walking*; MIT Thesis; 2018.

D. Rigobon, J. Lee, N. Hogan; *Effect of Stochastic Parameter Variation on Entrainment Behavior of a Stable Ankle-Actuated Walking Model*; MIT Undergraduate Research Journals; 2017.

D. Rigobon, J. Ochoa, N. Hogan; *Entrainment of Ankle-Actuated Walking Model to Periodic Perturbations via Leading Leg Angle Control*; ASME Dynamics Systems and Controls Conference; 2017.

PRESENTATIONS

Entrainment of Ankle-Actuated Mechanical Walker, ASME DSCC. (October 2017)

PROGRAMMING LANGUAGES

Fluent in: Python, R, MATLAB, L^AT_EX

Familiar with: Java, C++

REFERENCES

Prof. Racz, Assistant Professor, ORFE, Princeton University, mracz@princeton.edu

Prof. Sircar, Full Professor and Department Chair, ORFE, Princeton University,
sircar@princeton.edu

Prof. Shkolnikov, Associate Professor, ORFE, Princeton University, mykhaylo@princeton.edu

Prof. Pentland, Toshiba Professor of Media Arts and Sciences, MIT, sandy@media.mit.edu

LANGUAGES AND
HOBBIES

Fluent in Spanish and English; Proficient in French.
Interested in Ceramics, Music, Cooking, and Reading.