

RABIE RAMADAN

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EDUCATION

- Temple University, Philadelphia, PA, USA** *August 2014 – May 2020*
PhD in Mathematics (Thesis in Applied Math)
Thesis Title: Non-equilibrium Dynamics of Second Order Traffic Models
- American University of Beirut, Beirut, Lebanon** *August 2009 – May 2014*
Bachelor of Engineering, Civil and Environmental Engineering (with distinction)
Bachelor of Science, Applied Mathematics (with high distinction)
Concentration in Transportation Engineering
Minor in Operations Research

RELEVANT EXPERIENCE

- Temple University, Research Assistant Professor, Philadelphia, PA, USA** *June 2020 – present*
- Collaborate with researchers from seven academic institutions and industry partners on the CIRCLES project
 - Take a leadership role in the development and calibration of energy and microscopic traffic flow models
 - Regularly present my teams findings to the other campuses and institutions
 - A core participant of the 2020 IPAM long program: “Mathematical Challenges for Autonomous Vehicles”
 - Mentor an undergraduate student from the Electrical Engineering department on her undergraduate research
 - Teach undergraduate mathematics courses at the College of Science and Technology
 - This appointment partially funded by the DOE grant DE-EE000887 (EERE, VTO), [multi-institutional grant]
- MIT, Visiting Researcher, Boston, MA, USA** *May – June 2019*
- Derived a reduced linear model for weak solutions of second order non-linear traffic models
 - Used numerical methods to implement the derived model in MATLAB
 - Presented project results at a numerical analysis conference
 - Acquired experience in working on fast-paced projects with an expert in the field
- Temple University, Instructor Philadelphia, PA, USA** *August 2015 – December 2019*
- Taught Calculus II, Calculus I and Pre-Calculus, and assisted in teaching advanced math classes
 - Mentored first-year graduate students and helped them prepare for the Complex Analysis qualifying exam
 - Communicated complex ideas and worked effectively with students from a variety of backgrounds
 - Developed management, leadership and engagement skills for groups of 3–125 students
- University of Texas, Research Assistant Austin, TX, USA** *June – August 2013*
- Used a digital image correlation system, scripted in MATLAB, to monitor surface strains on steel bars
 - Participated in constructing reinforced concrete columns and conducting seismic performance tests
 - Learned to thrive in a collaborative, exceptionally organized and tightly scheduled laboratory

AWARDS, FUNDING AND FELLOWSHIPS

- Doctoral Dissertation Completion Grant** *January 2020*
- CST Outstanding Teaching Assistant Award** *December 2019*
- Temple University Presidential Fellowship** *August 2014*
- American University of Beirut Full Scholarship** *August 2009*

SKILLS

- Languages** English, Arabic
- Technical** Statistics, Machine learning, Data analytics & visualization, Mathematical modeling, Control theory
- Software** MATLAB, R, Python, L^AT_EX, VBA, HTML/CSS, JavaScript, Microsoft Office