# Terence M. Conlon terence.conlon@columbia.edu

(216) 308-4723 | Personal Website

Current Address 617 West 115th Street, Apartment 51 New York, NY 10025

#### EDUCATION

**Columbia University** – New York, NY Cumulative GPA: 4.333

York, NY M.S. in Mechanical Engineering, February 2018

**Columbia University** – New York, NY GPA: 3.778

**Duke University** – Durham, NC GPA: 3.813 Graduated *cum laude*  Ph.D. Candidate, Mechanical Engineering Expected May 2021

B.S.E. in Mechanical Engineering, May 2016

## EXPERIENCE

Columbia University Presidential Fellow – Columbia University, New York NY April 2016 – Present

• Recipient of the most prestigious fellowship given by The Fu Foundation School of Engineering and Applied Science at Columbia.

#### Head Teaching Assistant – Columbia University, New York NY

MECE 4210 – Energy Infrastructure and Planning (Professor Michael Waite)

• Roles included planning lessons, holding office hours and recitations, grading, and coordinating all course communication.

#### Angier B. Duke Scholar – Duke University, Durham NC

August 2012 – May 2016

Spring 2018

• Selected as one of 15 students in the Class of 2016 to receive Duke's most prestigious merit scholarship.

## ACTIVE RESEARCH

## **Irrigation Identification and Prediction**

- Downloading and processing large datasets of satellite imagery to extract phenologies of irrigated cropland.
- Applying computer vision and deep-learning techniques to known crop phenologies to predict the location irrigation in East Africa.

## Electricity Network Analysis and Design

- Using simulated irrigation electricity demands and grid-expansion optimization models to assess electrification pathways in Ethiopia.
- Modeling interconnected grid systems in the Eastern US to determine optimal methods of integrating renewable generation.

## **PUBLICATIONS**

- **Conlon T.**, Waite, M., Modi, V. (2019). Prioritizing heating and transport electrification to implement New York's new climate law. Paper submitted to *Nature Sustainability*, Oct. 2019 (under review).
- Conlon, T., Waite, M., Modi, V. (2019). Assessing new transmission and energy storage in achieving increasing renewable generation targets in a regional grid. *Applied Energy*, May 2019.
- **Conlon, T.**, Modi, V., Waite, M. (2018). The value of energy flexibility: Integrating wind resources in New York State. Paper presented at the ASME IMECE, Nov. 2018.

#### AWARDS

٠	Member, Pi Tau Sigma – National Engineering Honor Society	November 2014 – Present
٠	Pratt Undergraduate Dean's List	Spring 2013 – May 2016
٠	National Merit Scholar	Spring 2012
٠	<b>AP Scholar with Distinction</b> – <i>Ten AP courses taken, scored 5 on each.</i>	Spring 2012

## PROGRAMMING LANGUAGES

• Python (fluent), TensorFlow (fluent), MATLAB (fluent)