

Ida Weiss, Associate

Synapse Energy Economics | 485 Massachusetts Avenue, Suite 3 | Cambridge, MA 02139 |

(617) 849 -8017

iweiss@synapse-energy.com

PROFESSIONAL EXPERIENCE

Synapse Energy Economics Inc., Cambridge, MA. *Associate*, February 2024 – Present

- Performs quantitative and qualitative research and analysis on energy-sector issues including, energy justice, building and transportation electrification, distributed energy resources, and integrated resource planning.

Epsilon Associates, Maynard, MA. *Staff & Project Engineer*, November 2021 – January 2024

- Modeled stationary and mobile air pollution sources using air dispersion software (AERMOD) and summarized results in technical reports for regulators, private developers, and the public.
- Analyzed potential project impacts on EJ populations using socioeconomic, pollution burdens, public health, and demographic data.
- Developed project-level vehicle emissions inventories with EPA's Motor Vehicle Emissions Simulator.
- Oversaw environmental/air permit compliance for a new natural gas liquefaction plant in MA
- Used ArcGIS, Python, and MS Excel for EJ data visualization and meteorological data analysis.

Medford Engineering Division, Medford, MA. *Engineering Intern*, February – August 2020

- Developed an MS Excel resource guide on successful green infrastructure projects.
- Incorporated climate resiliency planning to the Wrights Pond Dam Emergency Action Plan.

Tufts Civil & Environmental Engineering Department, Somerville, MA. *Research Assistant*, June 2020 – May 2021

- Completed a year-long Honors Thesis: *Impact of Aviation Emissions on Black Carbon Concentrations in Communities Near Boston Logan Airport*.
- Drove an outfitted EV on mobile monitoring routes to sample Greater Boston air pollution.
- Cleaned, processed, and analyzed pollutant concentration data in Python and Excel; mapped black carbon and particulate matter in ArcGIS.
- Presented weekly findings to Tufts and BU's School of Public Health research team.

Tufts Biology Department, Santa María de Dota, Costa Rica. *Global Research Assistant*, Summer 2019

- Collected field data on >600 individual coffee plants on 30 coffee farms in rural Costa Rica.
- Interviewed 30 coffee farmers in Spanish on agricultural practices & climate perspectives.
- Translated and organized interview responses in MS Excel and analyzed in NVivo and R.
- Investigated trends between cropping intensity and coffee output and presented at Tufts Research Experience for Undergrads - Summer Research Symposium.

EDUCATION

Tufts University, Medford, MA

Bachelor of Science in Environmental Engineering, minor in Environmental Science and Policy, *magna cum laude*, 2021

Universidad de Carlos III, Madrid, Spain

Completed coursework in Fluid Mechanics, Python, Markets and the Environment (*Mercados y Ambiente*), and Engineering Business. Fall 2019

SKILLS

- **Air dispersion models:** AERMOD, AERSCREEN, CAL3QHC(R), CALINE
- **Vehicle emissions models:** MOVES
- **Programming/Computer:** Python, Matlab, R, NVivo, MS Office Suite
- **Spatial:** ArcGIS, ArcMap
- **Language:** Spanish

PUBLICATIONS

Mueller, S. N. Hudda, J. Levy, J. Durant, P. Patil, N. Franzen Lee, I. Weiss, T. Tatro, T. Duhl, K. Lane. 2022. Changes in Ultrafine Particle Concentrations near a Major Airport Following Reduced Transportation Activity during the COVID-19 Pandemic. *Environmental Science & Technology Letters* 9 (9). 706-711
DOI: 10.1021/acs.estlett.2c00322

Resume updated February 2024