

# MIGUEL M. MORAVEC

*www.miguelmoravec.com*

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## Education

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### VANDERBILT UNIVERSITY

Nashville, TN

- M.S. in *Civil Engineering* Oct. 2022
  - o GPA: 3.6/4
- B.A. in *Earth Science (Honors) & Communication of Science* with *Physics* Minor May 2018
  - o GPA: 3.7/4

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## Professional Experience

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### ROCKY MOUNTAIN INSTITUTE

*Senior Associate*

*Sept. 2022 – Present*

- Led the development of the Smarter MODES Calculator, an Excel-based tool which quantifies the emissions & public health benefit of expanding clean transportation choices
- Testified and briefed decision makers in US Congress, state legislatures, and the 'America Is All In' coalition regarding leading clean transportation policies and analysis

### VANDERBILT UNIVERSITY

*Center for Transportation and Operational Resiliency Research Assistant*

*July 2020 – Oct. 2022*

- Investigated impact of intermodal connectivity on supply chain resilience during disruptions with novel analysis of federal & crowd data for DHS published project. *R, ArcGIS*

### U.S. ENVIRONMENTAL PROTECTION AGENCY via ORAU

*Science Communication Associate*

*Jun. 2019 – Jul. 2020*

- Automated appropriations reporting process for cross-matrix research & policy team. *R*
- Devised and enacted digital outreach strategy for Nat'l Chemical Research Program. *Adobe*

### NISSAN NORTH AMERICA via Kelly Services

*Regional Consumer Affairs Specialist*

*Aug. 2018 – Apr. 2019*

- Collaborated with dealership and regional personnel to develop and communicate technical solutions to automotive clients. *Salesforce, Tableau*

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## Research Experience

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### COLUMBIA UNIVERSITY

*STEMSEAS Research Program Mentor*

*Aug. 2016 & Nov. 2021*

- Mentored student teams during 1,000 nm transits of Pacific Ocean aboard NSF vessels.
- Assisted in research curriculum development and generated outreach materials. *Adobe*

### METRO GOVT OF NASHVILLE

*Data Science for Social Good Fellow*

*Jun. 2021 – Aug. 2021*

- Forecasted 5 years of construction debris generation under various waste management policies to inform pathways to city sustainability goals. Created data dashboard. *R, Python*

### PRINCETON UNIVERSITY / NOAA

*Geophysical Fluid Dynamics Lab Intern*

*Jun. 2016 – Aug. 2016*

- Reduced processing time by 98% for North American Multi-Model Ensemble data tasks by developing scripts to automatically generate analysis & data visualizations. *Python, Linux*

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## Leadership & Honors

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**PRESIDENT:** Graduate Student Council, Vanderbilt University 2022

**CO-AUTHOR:** Utilizing Agent-Based Modeling to Evaluate Operational Impacts of an Incident and Possible Alternatives on U.S. Waterways, Transportation Review Board 2020

**INDUCTEE:** Physics Honor Society, Sigma Pi Sigma, Vanderbilt University 2018

**MEDALIST:** Houston Public Speaking Competition, Vanderbilt University 2016