

Research Interests

- Intelligent transportation systems and urban mobility simulation
- Data-driven modeling and optimization for control systems
- Applications of machine learning in traffic management
- AI-driven real-time traffic incident management for resilient and sustainable urban mobility
- Sustainable transportation solutions integrating emissions reduction and improved air quality
- Model Control for large scale systems

Education

Cornell University	Ithaca, NY, USA
PhD in Systems Engineering	Aug 2024-Present
Cornell University	Ithaca, NY, USA
BS in Biological Sciences	Aug. 2020 - May 2024

Professional Experience

Cornell University Information and Decision Science Laboratory • Joined the Information and Decision Science Laboratory to support analysis on data sets using Excel, Rstudio, and Python • Collaborating with other undergraduate and graduate students on interdisciplinary projects • Conducting Mobility simulations using SUMO (Simulation of Urban Mobility) software • Evaluating the impact of different mobility schemes and surrounding stability, and the implementation of AI neural networks in traffic event forecasting	Ithaca, NY, USA Aug. 2023 - Present
Cornell University Bowman Lab (Independent Study - BIOG 4990) • Conducting research on the evaluation of the concentration of bleach necessary to kill <i>Toxocara</i> eggs when used in conjunction with desiccation to ensure chicken protection • Designing and performing experiments using molecular and microbiological techniques • Using Microsoft Excel to record results and conduct data analysis	Ithaca, NY, USA Aug. 2023 - May. 2024
Cornell University O'Brien Lab (USDA Summer Internship) • Conducted research on the diversity of the iron microbiome in the human body and how iron levels vary between people based on their ethnic and racial identities • Used Microsoft Excel and R-Studio to identify and quantify iron-related bacteria in human fecal samples	Ithaca, NY, USA May 2023 - Aug. 2023
Cornell University O'Brien Lab (Independent Study - BIOG 4990) • Continuing to conduct research on the diversity of the iron microbiome in the human body and the variations in iron levels between people of different racial and ethnic identities • Using Microsoft Excel to identify and quantify iron-related bacteria in human fecal samples	Ithaca, NY, USA May 2023 - May 2024
Cornell University Goodale Lab • Aided in a team effort to conduct research on the properties of soils based on samples collected from sites around Ithaca • Measured the soil pH, determined the root biomass, and understood how soil pH impacted root abundance • Used Microsoft Excel to record and analyze impact of pH on soil properties	Ithaca, NY, USA Feb. 2022 - Aug. 2022
Georgia Institute of Technology SURE Program (Summer Undergraduate Research in Engineering/Sciences) • Participated in a 10-week summer research program designed to aid under-represented minority students in entering	Atlanta, Georgia, USA May 2022 - Aug. 2022

graduate school

- Conducted literature research review on the evolutionary and behavioral basis for why people naturally fear specific animals
- Reviewed relevant articles and books
- Prepared and delivered a PowerPoint presentation at the end of the program

Cornell University and Weill Cornell Medicine

Ithaca, NY, USA

WISER Program (Weill-Ithaca Summer Experience in Research)

June. 2021 - Aug. 2021

- Selected as one of the six students to participate in a joint program providing underrepresented and low-income students with biomedical guidance
- Conducted research on the role of Argonaute 2 protein in neuronal plasticity using bioinformatics
- Used Linux, Terminal, and Bioinformatics to analyze and visualize RNA-seq data
- Learned about neuroscience and molecular biology through mentorship and lectures

Publications

Conference Papers

- [1] T. Kinchen, P. Typaldos, and A. A. Malikopoulos, "A United Framework for Planning Electric Vehicle Charging Accessibility," to appear in the *Proceedings of the IEEE Intelligent Transportation Systems Conference (ITSC)*, 2026.
- [2] T. Kinchen, T. Bai, N. Venkatesh S., and A. A. Malikopoulos, "Spatiotemporal Forecasting of Incidents and Congestion with Implications for Sustainable Traffic Control," to appear in the *Proceedings of the American Control Conference (ACC)*, 2026.

Fellowships and Awards

- April 2026 American Control Conference (ACC) Travel Award
- Oct. 2025 Office of Inclusive Excellence Mentor Fellowship (Fall 2025 Semester)
- Jun. 2024: Cornell University Dean's List (Spring 2024 Semester)
- Mar. 2024: Recipient of Dean's Scholars Award from Cornell University
- Dec. 2023: Recipient of Undergraduate Research Grant from CALS, Cornell University
- Fall 2023: Acceptance into CALS Honors Research Program, Cornell University
- Jan. 2024: Cornell University Dean's List (Fall 2023 Semester)
- Jun. 2021: Cornell University Dean's List (Spring 2021 Semester)

Skills

- Theoretical knowledge: Bioinformatics, Data Analysis, Statistical Computing, Experimental Design
- Programming languages: Python, MATLAB, R
- Software/Tools:
 - General: Microsoft Office, RStudio
 - Simulation & Modeling: SUMO, Netedit
 - Audio Analysis: RavenPro
 - Operating Systems: Linux
 - Laboratory: pH Probe Operation
 - AI Neural Networks
 - Bidirectional Long Short-Term Memory (BiLSTM)
 - Diffusion Convolutional Recurrent Neural Network (DCRNN)

Academic Activities

- Membership
 - Multicultural Academic Council (MAC) Peer Mentoring Program 2025-Present
 - Black Graduate Professional Students Association 2025-Present
 - Office of Inclusive Excellence (OIE) Rising Researchers Mentorship Program 2025-Present

- Dean’s Scholars Program, Cornell University 2024–Present
- Biology Scholars Program (BSP), Cornell University 2020–2024
- Peer Mentorship Program (PMP), Cornell University 2020–2024
- Cornell Undergraduate Research Board (CURB) 2020–2024
- Conferences, Seminars, and Workshops
 - American Control Conference (ACC) Presentation New Orleans, Louisiana, 2026
 - Dean’s Scholars Student Spotlight, Summer Series Talk Cornell University, 2026
 - Cornell Summer Success Symposium Cornell University, 2025
 - Approaches to Designing Your Academic Job Talk Cornell University, 2025
 - NextGen Professors Program Power Mentoring Session Cornell University, 2025
 - Cornell Future Professors Institute Session Cornell University, 2025
 - Cornell Systems Summit Cornell University, 2024
 - Cornell Summer Success Symposium Cornell University, 2024