MATT FRANCHI

Cornell University Cornell Tech (NYC) mattfranchi [at] cs [dot] cornell [dot] edu mfranchi [dot] net New York, New York

EDUCATION

Ph.D.	Computer Science, Cornell University	2022-2027
M.S.	Computer Science, Cornell University	2022-2024
B.S.H.	Computer Science, Clemson University	2019-2021

PUBLICATIONS

Conference Proceedings

- 2025.d **Matt Franchi**, Nikhil Garg, Wendy Ju, and Emma Pierson. "Bayesian Modeling of Zero-Shot Classifications for Urban Flood Detection". Under Review. 2025 ACM Conference on Knowledge Discovery and Data Mining (KDD).
- 2025.c **Matt Franchi**, Hauke Sandhaus, Madiha Zahrah Choksi, Severin Engelmann, Wendy Ju, and Helen Nissenbaum. "Privacy in Dense Street Imagery". Under Review. 2025 ACM Conference on Fairness, Accountability, and Transparency (FAccT). Association for Computing Machinery, New York, NY, USA.
- 2025.b Dorin Shapira, **Matt Franchi**, and Wendy Ju. "Fingerprinting New York City's Scaffolding Problem with Longitudinal Dashcam Data". 19th International Conference on Computational Urban Planning and Urban Management (CUPUM). University College London, London, England.
- 2025.a **Matt Franchi**, Maria-Teresa Parreira, Frank Bu, and Wendy Ju. "The Robotability Score: Enabling Harmonious Robot Navigation on Urban Streets". In Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems (CHI '25). Association for Computing Machinery, New York, NY, USA. **robotability.cornell.edu**
- 2024.a **Matt Franch**i, Debargha Dey, and Wendy Ju. "Towards Instrumented Fingerprinting of Urban Traffic: A Novel Methodology using Distributed Mobile Point-of-View Cameras". In Proceedings of the 16th International ACM Conference on Automotive User Interfaces (AutomotiveUI). Association for Computing Machinery, New York, NY, USA. **Best Paper Honorable Mention**
- 2023.a **Matt Franchi**, J.D. Zamfirescu-Pereira, Wendy Ju, and Emma Pierson. 2023. "Detecting disparities in police deployments using dashcam data." In Proceedings of the 2023 ACM Conference on Fairness, Accountability, and Transparency (FAccT). Association for Computing Machinery, New York, NY, USA, 534-–544.
- 2022.b **Matt Franchi**, Rebecca Kahn, Mashrur Chowdhury, Sakib Khan, Ken Kennedy, Linh Ngo, Amy Apon. 2022. "Webots.HPC: A Parallel Simulation Pipeline for Autonomous Vehicles." In Practice and Experience in Advanced Research Computing 2022: Revolutionary: Computing, Connections, You (PEARC). Association for Computing Machinery, New York, NY, USA, Article 31, 1–4.

2022.a **Matt Franchi**, Rebecca Kahn, Linh B Ngo, Sakib Khan, Mashrur Chowdhury, Ken Kennedy, Amy Apon. "A Parallel Autonomous Vehicle Simulation Pipeline on High-Performance Computing." Compendium of the Transportation Research Board 101st Annual Meeting. Washington, DC: Transportation Research Board.

Datasets

2024.a **Matt Franchi**, J.D. Zamfirescu-Pereira, Wendy Ju, and Emma Pierson. 2024. "Replication Data for: Detecting disparities in police deployments using dashcam data (FAccT'23)", Harvard Dataverse, V1.

A 10% random and anonymized sample (2.4 million images) of a dashcam image dataset spanning New York City limits during 2020.

Reports and Other Publications

2024.a Matt Franchi. "Estimating the Perceived Claustrophobia of New York City's Streets." https://mattwfranchi.github.io

PRESS

- 2024.d "Think N.Y.C.'s Roads Are Crowded? Good Luck on the Sidewalks." The New York Times. https://www.nytimes.com
- 2024.c "Most claustrophobic areas in NYC based on sidewalks: Study". Fox 5 NY. https://fox5ny.com
- 2024.b "Study looks at 'claustrophobic' city sidewalks". NY1 News. https://ny1.com
- 2024.a "New York City is covered in illegal scaffolding". The Economist. https://economist.com
- 2023.b "The NYPD doesn't report where it deploys police. So scientists used AI, dashcams to find out.". The Gothamist. https://gothamist.com
- 2023.a "Dashcam images reveal where police are deployed". The Cornell Chronicle. https://news.cornell.edu
- 2021.a "To Gen Zers Working From Home, the Office Is a Remote Concept". The Wall Street Journal. https://wsj.com

INVITED TALKS

- 2024.d "Detecting urban floods from dashcam data with vision language models". 2024 Urban Tech Summit. New York, New York.
- 2024.c "EAAMO Bridges: An introduction to EAAMO's semester-long working groups". 2024 ACM conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO).
- 2024.b "Novel Approaches to Studying the Law Enforcement Investigatory Process". 2024 Association for Psychological Science (APS) Annual Convention.
- 2024.a NYC Transportation Data Connect Symposium. NYC Mayor's Office, The Microsoft Garage. https://urban.tech.cornell.edu/hownycmoves/.

GRANTS AND AWARDS

2025	Siegel PiTech PhD Impact Fellowship, Design Trust for Public Space
2024	Digital Life Initiative (DLI) Doctoral Fellowship
2024	Finalist, Cornell Tech Urban Tech Hub Pilot Policy Studio
2022	Cornell Mary E. and Anna K. Cunningham Fellowship
2022	Cornell Dean's Excellence Fellowship
2021	Clemson University DuPont Best Undergraduate Award
2021	Clemson University CECAS Summer Research Opportunity Grant
2020	Tutor of the Month, Clemson Academic Success Center
2019	President's List - All 4 Undergraduate Semesters

LEADERSHIP AND SERVICE

Service to the university

Cornell University

- 2025 Reviewer, PhD Admissions Committee
- 2024 Organizer, Cornell Urban Data Science Reading Group
- 2023 Vice President, Cornell Computer Science Graduation Organization (CSGO)
- 2023 CS Representative, Cornell Graduate Student Assembly (GPSA)
- 2022 Pen-pal, Cornell Write-A-Researcher

Clemson University

- 2021 Board Representative, Clemson University Student Government
- 2021 School of Computing Representative, CECAS Student Advisory Board
- 2020 Board Member, Information Technology Student Advisory Board
- 2019 Secretary, Clemson Piano Club

Other academic service

2024- Organizer, EEAMO urban data science working group

Peer Review

- 2025 Program committee member, ACM Conference on Fairness, Accountability, and Transparency (FAccT)
- 2024 Reviewer, ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM)
- 2024 Program committee member, ACM Conference on Fairness, Accountability, and Transparency (FAccT)
- 2023 Program committee member, ACM Conference on Fairness, Accountability, and Transparency (FAccT)

MEMBERSHIPS

Equity and Access in Algorithms, Mechanisms, and Optimization (EEAMO)

Association for Computing Machinery

Queer in Al

Digital Life Initiative

Cornell Tech Urban Tech Hub

Omicron Delta Kappa

Upsilon Pi Epsilon Computing Honors Society

ASSISTANTSHIPS

Cornell University

- 2025.b Teaching Assistant, Urban Design Strategies with Dr. Ariel Noyman
- 2025.a Teaching Assistant, Smart Cities with Dr. Anthony Townsend
- 2024.c Teaching Assistant, Urban Systems with Prof. Michael Samuelian
- 2024.b Teaching Assistant, Introduction to Computer Vision with Dr. Noah Snavely
- 2024.a Graduate Research Assistant, with Dr. Emma Pierson
- 2023.b Teaching Assistant, Applied Machine Learning with Dr. Volodymyr Kuleshov
- 2023.a Teaching Assistant, Building Startup Systems with Prof. Danny Perez
- 2022.a Research Assistant, with Dr. Wendy Ju and Dr. Emma Pierson

Clemson University

- 2021.a Research Assistant, with Dr. Amy Apon and BMW IT Research Center (REU)
- 2020.a Teaching Assistant, Computer Science II
- 2019.a Computer Science Tutor, Academic Success Center

PROFESSIONAL EMPLOYMENT

2024-25	Research Fellow, Hayden AI, San Francisco, California
2023	Chief Engineer, Generative AI & Fashion, ARI (stealth startup), New York City, New York
2023	Fashion Model, HOMME Management, New York City, New York
2022	Computer Science, Math, Physics Tutor, Capabilities, Charleston, South Carolina
2021-22	Software Engineer, High Side Technology, Charleston, South Carolina
2020-21	Computer Scientist Intern, High Side Technology, Charleston, South Carolina