Samuel Li

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EDUCATION

Carnegie Mellon University August 2025
Master of Science in Robotics

University of Illinois at Urbana-Champaign May 2023
Bachelor of Sciences in Mathematics & Computer Science *GPA: 3.88/4.00*

- **Coursework**: Machine Learning, Reinforcement Learning, Intro to Machine Perception, Deep Learning for Computer Vision, Artificial Intelligence, Honors Real Analysis, Honors Abstract Linear Algebra, Algorithms
- **Honors**: Campus Honors Program Chancellor's Scholar, Grainger Engineering Illinois Undergraduate Research Scholar, Liberal Arts & Sciences Edmund J. James Scholar

WORK EXPERIENCE

Capital One McLean, VA
Software Engineering Intern *June 2023-August 2023*

- Developing a Playwright plugin for efficient, parallelized end-to-end automated testing using TypeScript

Software Engineering Intern *June 2022-August 2022*

- Used AWS, SQL, and React to create a user-friendly dashboard in production displaying dynamic tables, charts, and maps to provide accurate and insightful reporting to combat redlining for the Community Reinvestment Act

University of Illinois Department of Computer Science Urbana, IL
Course Assistant, Modeling and Learning in Data Science (CS 307) *August 2022-Present*

- 1 of 3 undergraduate CAs (no graduate TAs) holding office hours, grading, creating weekly labs, and assisting Prof. Mahesh Viswanathan with course development in a first-time offered machine learning course in Python

Course Assistant, Intro to Computer Science (CS 125) *January 2020-May 2020*

- Held weekly office hours and assisted in labs to help students with course materials and programming in Java

RESEARCH EXPERIENCE

University of Illinois Department of Computer Science Urbana, IL
Undergraduate Assistant supervised by Prof. Yuxiong Wang *March 2022-Present*

- Working on a computer vision project to detect Parkinson's disease using attention mechanisms to learn from temporal changes in informative facial features on a novel video dataset (paper in preparation)
- Experience with SOTA FER, CNN, few-shot learning, and transformer models for video classification/detection

University of Illinois Department of Atmospheric Sciences Urbana, IL
Undergraduate Researcher working with Prof. Ryan Sriver *February 2020-Present*

- First author on skillful winter energy demand prediction studies on varying time scales
- Implemented and tested LSTMs for skillful weekly winter energy demand prediction with up to 4 weeks lead time

PUBLICATIONS

- Andy Zhuo*, **Samuel Li***, Pranav Sriram*, Xiang Li*, Jiahua Dong, Ansh Sharma, Yuanyi Zhong, Shirui Luo, Volodymyr Kindratenko, Joerg Heintz, Christopher Zallek, and Yu-Xiong Wang, "YouTubePD: A Multimodal Benchmark for Parkinson's Disease Analysis", *Datasets and Benchmarks Track, NeurIPS 2023*
- **Samuel Li**, Ryan Sriver, and Douglas E. Miller, "Skillful Prediction of Seasonal Energy Consumption Based on Surface Climate Information", *Environmental Research Letters 2022*

CONFERENCE PRESENTATIONS

- **Samuel Li*,** Pranav Sriram*, Andy Zhou*, Xiang Li*, and Yuxiong Wang, "Few-Shot Parkinson's Disease Detection From Facial Expressions", *ISUR Research Expo,* Urbana, IL, May 2023
- **Samuel Li,** Ryan Sriver, and Savana Ammons, "Subseasonal Prediction of Energy Consumption using Long Short-Term Memory Models", *American Geophysical Union,* Chicago, IL, December 2022
- **Samuel Li,** Ryan Sriver, and Douglas E. Miller, "Seasonal Prediction of Winter Energy Demand over Western Europe", *Illinois Undergraduate Research Symposium,* Urbana, IL, May 2022
- **Samuel Li,** Ryan Sriver, Douglas E. Miller, and Lei Wang, "Skillful Prediction of UK Seasonal Energy Consumption Based on Climate Information", *American Meteorological Society*, New Orleans, LA, January 2021

AWARDS

- Illinois Scholars Undergraduate Research Award 2022
- Campus Honor's Program Summer Research Award 2020, 2022
- Student Award to Attend the 101st American Meteorological Society Annual Meeting 2021