

SELINA CHENG

Research Interests: Multimodal AI, Embodied AI, Spatial Reasoning, Computer Vision, Robotics

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EDUCATION

Macaulay Honors College at CUNY Hunter College

B.A. in Computer Science (Honors), Statistics (*Minor in Linguistics*)

New York, New York

August 2023 - Present

- Cumulative GPA: 3.66

- Expected Graduation: May 2027

- Relevant Coursework: Artificial Intelligence, Machine Learning, Calculus 3, Linear Algebra, Bayesian Statistics

RESEARCH AND WORK EXPERIENCE

Cornell Tech, Cornell University

New York, New York

Student Researcher (advised by Professor Yoav Artzi and Anne Wu)

May 2025 - Present

- Developing novel benchmark inspired by cognitive psychology research to evaluate the spatial reasoning abilities of multi-modal large-language models (MLLMs)
- Created a full-stack web platform for conducting human studies on Prolific to serve as a performance baseline
- Implemented an end-to-end pipeline to automate MLLM experimentation, from synthetic data creation, using programmatically generated 3D scenes in Blender, to results generation, automating inference and evaluation for both commercial (e.g., Gemini, ChatGPT) and open-source (e.g., InternLM, Qwen, DeepSeek) models

MIT Quantitative Methods Workshop Program

Cambridge, Massachusetts

Workshop Participant

Jan 2025

- Applied ML models (PCA, K-Means Clustering, Linear Regression) in Python to analyze and extract patterns from high-dimensional neuroscience datasets
- Developed Bayesian statistical models and applied deep learning to differential gene expression analysis and protein structure prediction

New York Hall of Science

New York, New York

Science Education Facilitator

Jun 2024 - May 2025

- Performed on-stage science demonstrations for audiences of 50+ visitors every shift and facilitated hands-on exhibits

CUNY Hunter College

New York, New York

AI Robotics Research Intern

Jul 2024 - Aug 2024

- Researched and proposed an AI product prototype with RGB-D sensors and SLAM for the visually impaired

PRESENTATIONS

Can Vision-Language Models Do Symbol Grounding and Spatial Reasoning in Map Tasks?

CUNY Honors Connect at Cornell Tech Symposium 2025 - Talk and Poster

TECHNICAL SKILLS

AI / Data Science: PyTorch, HuggingFace Transformers, Gemini API, scikit-learn, NumPy, pandas, matplotlib, seaborn, SciPy, PyMC, ArviZ, Pillow

Languages: Python, C++, Java, TypeScript, JavaScript, SQL (PostgreSQL), HTML/CSS

Tools / Frameworks: Git, GitHub, Linux, Next.js, Vercel, Blender (Python API)

HONORS AND AWARDS

Hunter College Dean's List

Aug 2023 - Present

The John P. McNulty Scholars Program for Leadership in Science & Mathematics

Apr 2025

Daedalus Honors Computer Science Scholars Program

Aug 2023

Full-Tuition Merit Scholarship at Macaulay Honors College

Aug 2023