# Lili Mkrtchyan

202-468-9717 | lm688@cornell.edu | linkedin.com/in/lili-mkrtchyan | https://lilymkrtchyan.github.io/ | Ithaca, NY

#### **EDUCATION**

## Cornell University, College of Arts & Sciences

Ithaca, NY May 2025

Bachelor of Arts in Information Science, Cognitive Science

• **GPA:** 3.73 | Davis Scholar, Dean's list

University of Edinburgh, Study Abroad

January 2024 – May 2024

United World College Dilijan, Armenia

2019-2021

Yale University, Yale Young Global Scholars

July 2020

## **SKILLS**

- **Programming/Markdown Languages:** Python, Java, JavaScript, R, PHP, TypeScript, HTML/CSS, React, Arduino
- Data Analysis/Prediction Tools: Python, R, Machine Learning, Statistical Theory, SQL
- Design Tools: Figma, Notion, Canva, Adobe InDesign, Fusion 360, Inkscape
- Languages: Fluent in English, Russian, Armenian

## **WORK & LEADERSHIP EXPERIENCE**

# Armenian National Institute/ Armenian Assembly

Washington, D.C.

Terjenian-Thomas Intern

June 2024 - August 2024

- Participated in an 8-week internship program focusing on the policy-making process in Washington, D.C., specifically addressing issues important to the Armenian American community.
- Coded >200 HTML/CSS webpages based on the archived PDF files for the upcoming Assembly website.
- Effectively communicated Armenian issues and engaged in lobbying efforts at the U.S. Congress, distributing Rep. Adam Schiff's letter on the destruction of Armenian heritage in Nagorno-Karabakh and advocating for preservation.
- Conducted research on the Nagorno-Karabakh issue, the blockade of the Lachin corridor, and the ethnic cleansing of Armenians in Artsakh, contributing to the Assembly's informational resources.
- Met with various congresspeople (e.g., Rep. Nancy Pelosi, Rep. Adam Schiff, Sen. Ed Markey)

#### **Nylon Software**

Ithaca/Remote, NY

Full Stack Developer

June 2023 – Sept 2023

- Developed an application that facilitates partnerships between independent local businesses and enables users to easily participate in loyalty programs.
- Conducted market research by interviewing business owners to identify issues on customer retention and reward programs.
- Created 20 front-end screens using React framework within a tight deadline of 2 weeks.
- Collaborated with a team consisting of a marketer and 6 other full stack developers.
- Received an invitation for a YC Combinator interview, showcasing the innovation of the startup.

# The Cornell Daily Sun

Ithaca, NY

Associate Editor in Training

September 2023 - October 2023

- Completed a comprehensive 6-week training program focused on associate editor responsibilities.
- Oversaw and edited the subjective section (50 writers) of the Cornell Daily Sun, including the opinion section, dining and arts sections, and guest columns. Supervised the dining and arts editors.
- Attended weekly managing board meetings of 7 people, actively engaging in executive decision- making processes to shape the newspaper's vision.
- Resulted in departmental changes through actively advocating for underrepresented groups in my column read by 16,000 readers in print and 200,000 readers per month on the website.

#### **International Students Union (ISU)**

Ithaca, NY

Vice President of Publicity

September 2021 - March 2023

- Edited, coordinated, and sent out the bi-weekly newsletter to over 100 active members.
- Led a 10-person team through mentorship and systematic meetings, resulting in 500 student engagements
- Collected \$4,000 for the annual fundraiser for Armenia and Iran.
- Initiated the news reporting protocols for the club to be more transparent and inclusive.

#### **PROJECTS**

## **Technical Skills in Robotics and Smart Sensor Integration**

Ithaca, NY

Team Member

September 2024 – December 2024

- Designed and developed CubeScrub, the first robot of its kind for efficient cleaning, featuring three-axis movement, precise navigation controls, and a spinning arm for scrubbing.
- Collaborated with a team to execute hardware development, wiring, programming, laser cutting, and 3D modeling and printing to bring the robot from concept to reality.
- Utilized advanced tools and techniques to create an innovative and functional robotic system.

• Prepared for public exhibition at the Ithaca Science Center on December 14th, showcasing CubeScrub's groundbreaking design and capabilities.

## Student Consultant and Team Lead, StudioLab

Ithaca, NY

Producer - Team Lead

September 2024 – December 2024

- Led a team collaboration with Newfield School District to design a campaign for the Virtual Academy to reduce dropouts
- Conducted research on public school data, competitor charter schools, best practices in virtual learning, and transmedia communication theory.
- Developed campaign materials, including a website, flyers, and infographics, to promote the Virtual Academy's flexible learning opportunities.
- Advised other project teams during guild workshops, providing guidance on campaign strategies and project execution.
- Collaborated with the AJ Maste Memorial Foundation team to create a campaign encouraging young activist groups to apply for funding.
- Supported Health Access Connect (HAC) team in developing internal and external reports to support fundraising efforts for equitable healthcare access in Uganda.

## Participatory Design Research and Technology Development Initiative

Edinburgh, UK

Team Member

January 2024 - May 2024

- Collaborated with a multidisciplinary team in the course "Data, Design, and The City" to tackle tourist traffic congestion during the Edinburgh Fringe Festival.
- Conducted focus groups with past festival attendees to gather insights into their experiences and needs.
- Performed elicitation studies to observe how participants planned their festival activities using existing tools.
- Interviewed tourist agencies to understand operational challenges during peak times.
- Consulted with Joshua Ryan-Saha, co-founder of TravelTech, to explore the integration of AI and data into tourism.
- Enhanced understanding of participatory design and the interconnectedness of urban design, travel, and technology.

## **Digital Product Design**

Ithaca, NY

Case Study

September 2022 – December 2022

- Conducted thorough user research to ideate and develop an impactful Live Chat feature for Telegram.
- Employed Figma to craft a comprehensive range of interactive prototypes, spanning low, middle, and high-fidelity iterations, effectively translating conceptual designs into tangible user experiences.
- Innovatively explored diverse user flows and visual representations, meticulously presenting the proposed solution through thoughtfully designed prototypes aimed at real-time communication and strengthening user relationships.

## RESEARCH EXPERIENCE

## SciFi Lab, Cornell University

Ithaca, NY

Research Assistant

September 2024 – Ongoing

- Contributed to the development of glasses fitted with infrared sensors to detect eyelid movements, blinks, and twitches.
- Collected and analyzed data to identify patterns in eyelid behavior, with the goal of advancing early detection of mental health disorders and fatigue.
- Applied knowledge of cognitive science and computational neuroscience to enhance the design and functionality of healthcare technology.

#### Null Compliance: NYC Local Law 144 and Algorithm Accountability

Ithaca, N

Student Contributor

September 2023 – December 2023

- Conducted click path analysis to evaluate the accessibility of companies' Bias Audit Reports and AI tool usage notices on their websites.
- Assessed compliance with NYC Local Law 144, which mandates companies using automated employment decision tools to publish Bias Audit Reports addressing potential race and gender bias.
- Tracked the availability of required reports and notices, highlighting the state of compliance with AI-driven hiring system regulations.
- Contributed findings to research presented at FAccT, The ACM Conference on Fairness, Accountability, and Transparency (June 2024).
- Enhanced understanding of algorithm accountability and the challenges of enforcing transparency in AI systems.

#### Current Research in Emotion, Cognition, and Brain

Ithaca, NY

Student Contributor

January 2023 – May 2023

- Explored advanced topics in neuroscience and psychology, focusing on how the brain represents internal physiological states and their influence on emotional experiences.
- Synthesized scientific literature through written reactions to primary research articles, contributing to a deeper understanding of interoception-related debates and advancements.
- Presented research findings through two co-presentations, honing skills in oral communication and collaboration
- Expanded understanding of the role of interoception in shaping emotion, cognition, and behavior through a multidisciplinary approach.