Lili Mkrtchyan
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Education

Cornell University, College of Arts & Sciences   Ithaca, NY
Bachelor of Arts in Information Science, Cognitive Science, GPA: 3.8   Expected May 2025
Related Courses: Intro to Prototyping & Physical Computing, Re-Designing Robots, App Design and Programming, Web Development and Design; Trends in Web Development; Digital Product Design; Designing Tech for Social Impact, Making Change by Design; OOP & Data Structures (Java); Discrete Structures; Networks; Data Science; Backend Development; Machine Learning

Technical Skills

- **Back-end Development Tools:** Python, Java, OOP Programming, SQL, Flask, SQLAlchemy, SQLite3
- **Front-end Development Tools:** HTML/CSS & JavaScript, TypeScript, PHP, React.js, Node.js, Vue.js, Arduino
- **Developer Tools:** Git, GitHub, Docker, DockerHub, VS Code, Eclipse, Atom & Postman, Jupyter
- **Design Tools**: Figma, Notion, Canva, Adobe InDesign
- **Data Analysis/Visualization Tools:** Python Pandas, Python Numpy, R

Project Experience

Assistive Moving Cart for Statler Hotel Housekeeping   **Ithaca, NY**
Designer & Developer   Jan 2025 – ongoing
- Collaborated with Statler Hotel's housekeeping to design an assistive moving cart to reduce weight and improve efficiency.
- Developed a load bearing and weight distributing optimization mechanism.
- Integrated Arduino and sensor-based control systems for improved functionality.

Ithaca Soap   **Ithaca, NY**
 UI/UX Designer   Jan 2025 – ongoing
- Conducted user research, client interviews, and design frameworks analysis to refine UI/UX.
- Utilized Vue.js framework for development, including wireframing, prototyping, and deployment.

CubeScrub – Robotic Cleaning Arm   **Ithaca, NY**
Designer & Developer   June 2023 – August 2023
- Developed a robotic cleaning arm for curved dishes using 5 motors (5V), synchronized 2 motors for coordinated movement
- Implemented mechanical systems as belt & pulley for 3D movement, rack and pinion, a ball joint for a flexible cleaning arm
- Designed and fabricated the physical structure using 3D printing, laser cutting, and CAD modeling.
- Led wiring and programming of all components using Arduino

Participatory Design Research and Technology Development Initiative   **Edinburgh, UK**
UI/UX Designer   Jan 2024 – May 2024
- Collaborated with a multidisciplinary team to tackle tourist traffic congestion during the Edinburgh Fringe Festival.
- Conducted user research through focus groups, elicitation studies, and stakeholder interviews to gather insights from past festival attendees and tourist agencies, identifying key challenges and user behaviors in event planning
- Consulted with Joshua Ryan-Saha, co-founder of TravelTech, to explore the integration of AI and data into tourism.

Nylon Software start-up   **Ithaca, NY**
Full Stack Developer   June 2023 – August 2023
- Developed an app that facilitates partnerships between local businesses and enables users to participate in loyalty programs.
- Conducted market research by interviewing business owners to identify issues related to customer retention and reward.
- Contributed to the design and flow prototyping in Figma, incorporating best design principles.
- 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.

Extracurricular Activities

International Student Union (ISU)   **Ithaca, NY**
Vice-President of Publicity   March 2022-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.

Cornell Daily Sun   **Ithaca, NY**
Associate Editor in Training, Opinion Columnist   August 2022-March 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.