# **ALISSA HSU**

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#### **EDUCATION**

## New York University, Courant Institute of Mathematical Sciences

New York, NY

Bachelor of Arts in Computer Science, Minor in Web Programming

May 2026

• **GPA**: 3.52/4.00 | **Courses**: Web Development, AI Fundamentals, Graphic Design, Data Structures and Algorithms, Computer Systems Organization, Drawing on the Web, Statistics, Discrete Math

#### **EXPERIENCE**

Tribeca Immersive New York, NY

Immersive Facilitator & De-installation Crew Member

- Developed hands-on familiarity with immersive technical system to help guide visitors effectively through each piece
- Responded to and troubleshot live issues with interactive installations, minimizing disruption to audience experience
- Collaborated with technical crew to carefully disassemble complex, delicate installations for safe transport and storage

# Ideas Lab New York, NY

Software Engineering, Machine Learning Intern

- Developed a computer vision model (YOLOv8) with 85% accuracy to support integral in-app ball trajectory analysis
- Engineered a synthetic data generator (OpenCV) to produce 1,000+ images to account for all possible conditions
- Constructed convolutional neural networks using PyTorch and TensorFlow to create a precise object detection model

# Kaizen8 Closter, NJ

Product Management Intern

- Compiled data on 100+ up-and-coming products, contributing to the company becoming a top 100 Amazon seller
- Broadened the range and diversity of the distributor network, expanding the product catalog to 2,500+ items
- Improved order fulfillment efficiency by 20% by optimizing the structure of product preparation workflows

### **PROJECTS**

## A Day in My Life (Web Experience) – HTML/CSS/JS

• Developed a responsive, interactive digital diary using animation, DOM manipulation, and user interaction to showcase narrative UX design.

## HABITat (Product Design) - Arduino, Figma

• Completed full product design cycle for an Arduino-powered device that encourages environmentally conscious routines through a playful, gamified approach.

#### Lyric Visualizer (TouchDesigner) - TouchDesigner, Python

• Engineered a real-time, audio-reactive visualizer using 3D geometry, webcam input, and shader effects for immersive interaction design.

## 3D Stained Glass Angel (3D) - Three.js, JavaScript

• Created a WebGL-based 3D experience using Three.js to explore real-time rendering, light modeling, and transparent material effects.

## **AWARDS**

• NYU 2025 Climate Change Film Festival, 2nd place

#### SKILLS

**Programming Languages:** Python, Java, C, HTML, CSS, JavaScript, SQL, PHP **Creative Tools:** TouchDesigner, Arduino, Unity, Blender, Figma, Adobe Suite

Frameworks/Libraries: React, Node JS, WordPress, PyTorch, Scikit-learn, OpenCV, Deepface, Three.js, p5.js

Interests: Jack Stauber animations, running, tennis