

ALISSA HSU

395 Prospect Place, Brooklyn, NY 11238 | +1 (201) 937-7984 | aoh2024@nyu.edu | <https://alissahsu22.github.io/>

EDUCATION

New York University, Courant Institute of Mathematical Sciences

New York, NY

Bachelor of Arts in Computer Science, Minor in Web Programming

Expected May 2026

- **GPA:** 3.52/4.00 | **Courses:** Data Structures, Basic Algorithms, AI Fundamentals, Web Development, Discrete Math, Statistics, Calculus, Computer Systems Organizations, Drawing on the Web
- **Activities:** Creative Tech club (President), Tech@NYU, NetImpact

WORK EXPERIENCE

Kaizen8

Closter, NJ

Software Engineering Intern

May 2024 – Aug 2024

- Launched full-stack website showcasing the company's newest product utilizing third-party and Shopify APIs
- Implemented custom Shopify Liquid code to replace expensive app add-ons, cutting operational costs by \$500+
- Integrated site with in-house systems, streamlining exportation and cutting third-party order fulfillment costs by 20%

Ideas Lab

New York, NY

Software Engineering Intern, Machine Learning

May 2023 – Aug 2023

- Developed a computer vision model (YOLOv8) with 85% accuracy to support integral in-app golf ball trajectory analysis
- Engineered a synthetic data generator (OpenCV) to produce 1,000+ diverse 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

May 2022 - Aug 2022

- Compiled data on 100+ up-and-coming products, contributing to the becoming a top 100 Amazon seller globally
- 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

Emotion-Based Music Recommender System Using Image Classification

- Designed the website to be an interactive and fun platform for users to play with emotion-based music recommendations
- Leveraged a pre-trained emotion detection model from DeepFace with over 97% accuracy for real-time emotion recognition
- Integrated Spotify API to pair detected emotions with over 1,000 music tracks and user personalized recommendations

Generative Art Portfolio

- Crafted each piece to explore novel full-stack tools while delivering unique and immersive artistic experiences to users
- Experimented with mathematical calculations, randomness, and user interactivity to create visually compelling artwork
- Demonstrated proficiency in navigating Web APIs, raster and vector graphics, CSS animation, JavaScript libraries, etc.

Full Stack E-Commerce Site with Shopify

- Integrated Shopify API to expand on the platform's capabilities by streamlining payment and inventory automation processes
- Enhanced the visual appeal and efficiency of consumer experience with page customizations to boost sales conversion rate

Computer Vision Golf Ball Tracking and Detection

- Produced an ML model capable of precise detection adept at handling varying trajectories and lighting conditions
- Examined the model's feature map to correct for false positives, lower detection regions, etc. to improve future iterations

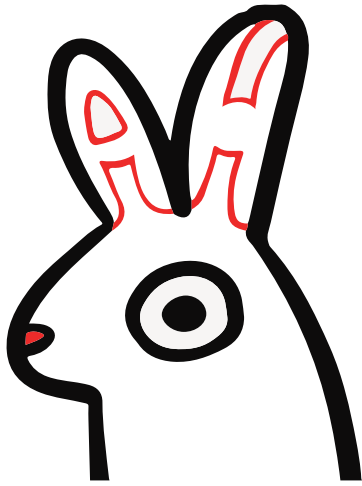
SKILLS AND INTERESTS

Programming Languages: Python, Java, C, React, HTML, CSS, JavaScript, SQL, PHP, Swift

Frameworks/Libraries: WordPress, PyTorch, Pandas, NumPy, Scikit-learn, Matplotlib, YOLOv8, OpenCV, Deepface

Technical Skills: Figma, Adobe Illustrator, Premiere Pro, Procreate

Interests: Animation, running, tennis



ALISSA HSU

aoh2024@nyu.edu | 201-937-7984 | alissahsu22.github.io

395 Prospect Place, Brooklyn, NY 11238

EDUCATION

New York University

Bachelor of Arts in Computer Science,
Minor in Web Programming
Expected May 2026

SKILLS

Creative Tools: TouchDesigner,
Unity, Blender, Three.js, p5.js

Design & Animation: Adobe Suite,
Procreate, Figma

Programming: Python, Java, C#,
HTML/CSS/JS, React, SQL, PHP, APIs,
ML/AI

AWARDS

NYU 2025 Climate Change Festival - 2nd

EXPERIENCE

Tribeca Immersive

Immersive Facilitator & De-installation Crew Member

- Gained experience with technical systems to effectively guide visitors
- Troubleshoot interactive components in fast-paced environments
- Assisted technical team in safely deconstructing fragile, intricate works

Ideas Lab

Software Engineer, Machine Learning

- Developed AI model for real-time golf ball tracking
- Optimized training data to ensure precise trajectory predictions
- Improving in-app analytics to better support users' insights

PROJECTS

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

Designed an interactive digital diary combining animation and user interaction to explore storytelling through web-based experiences.

Lyric Visualizer (TouchDesigner) - TouchDesigner, Python

Created a real-time, audio-reactive lyric visualizer using 3D geometry, webcam input, and visual distortion effects inspired by live concert visuals.

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

Built an interactive browser-based 3D angel inspired by stained glass, experimenting with light, transparency, and 3D form in a virtual environment.

In The Mind Palace (Animation) - Procreate, Premiere Pro

Directed and animated a short film exploring internal dialogues through 2D frame-by-frame animation.