**ALISSA HSU**

310 3rd Avenue, New York, NY 10010 | +1 (201) 937-7984 | aoh2024@nyu.edu

**EDUCATION**

**New York University, Courant Institute of Mathematical Sciences New York, NY**

*Bachelor of Arts in Computer Science, Minor in Business Studies and Web Programming and Applications* *Expected May 2026*

* **GPA**: 3.37/4.00 | **Courses**: Web Design and Computer Principles, Discrete Math, Statistics, Calculus, Macroeconomics,

Financial Accounting, Computer Systems Organizations, Data Structures, Web Development, Drawing on the Web

* **Activities**: Tech@NYU, NetImpact (social entrepreneurship club), EMPIRE (entrepreneurship club), Marketing Society club

**Northern Valley Regional High School at Demarest Demarest, NJ**

*High School Diploma*

* **GPA**: 4.54 | SAT: 1520/1600, AP World History: 5, AP Psychology: 5, AP Microeconomics: 4
* **Activities:** Japan Club (President), KARE Volunteer Club (President), Multicultural Club (Vice President), Varsity Tennis

(Captain), Varsity Winter track and field (Captain), Gifted and Talented club, National Honors Society, Art club

**RELEVANT EXPERIENCE**

**Kaizen8 LLC Closter, NJ**

*Software Engineer Intern*  *May 2024 – present*

* Launched full-stack website showcasing the company’s newest product utilizing third-party and Shopify APIs
* Collaborated with management and cross-functional development teams to bring the envision result to life
* Implemented systems optimizations to maximize efficiency and improve the customer’s in order to drive sales

**Ideas Lab New York, NY**

*Machine Learning Intern*  *May 2023 – Aug 2023*

* Assembled a computer vision model (YOLOv8) trained on 1,000+ hand drawn annotations to track real golf balls
* Generated 1000+ pieces of synthetic data with simulated trajectories and varied backgrounds to diversify training data
* Constructed convolutional neural networks with Pytorch to finetune parameters within each layer

**Kaizen8 LLC Closter, NJ**

*Product research and Distributor Relations Intern May 2022 - Aug 2022*

* Compiled data on 100+ up-and-coming products to grow the company into a top 100 Amazon seller in the world
* Expanded the range and diversity of the distributor network cater to a broader customer base with innovative goods
* Enhanced the exportation speed by restructuring the efficiency of product preparation methods

**PROJECTS**

**Full Stack E-Commerce Site with Shopify Closter, NJ**

* 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 New York, NY**

* 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

**Generative Art Portfolio New York, NY**

* 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.

**SKILLS AND INTERESTS**

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

**Frameworks/Libraries:** WordPress, PyTorch, Pandas, NumPy, Scikit-learn, YOLOv8, Selenium, OpenCV

**Languages:** Japanese (proficient)

**Interests:** Doubles tennis, cooking new dishes, drawing