

# BENJAMIN YAM

Flushing, NY || 646-591-2574 || by82@cornell.edu || www.linkedin.com/in/benjaminyam1

## EDUCATION

**Cornell University**, College of Engineering,

Master of Engineering, Computer Science

Bachelor of Science, Major in Computer Science, Minor in Mathematics

Ithaca, NY

Expected Dec 2024

GPA: -

Aug 2021 - May 2024

GPA: 3.5

**Relevant Courses:** Computer Vision, Robot Learning, Reinforcement Learning, Machine Learning, Computer Graphics, Database Systems, Artificial Intelligence, Functional Programming, Operating Systems, Computer System Organization, Probability and Statistics, Data Structure, Discrete Structure, Python

**Awards:** Dean's Honor List, National Honors Society, NYS Academic Excellence Scholarship, AP Scholar with Distinction, Hope Scholarship Foundation Award

## PROJECTS

### **Snack Searching Web App**

Used SVD and Cosine Similarity to recommend snacks to user from a dataset of snacks (web scraped from Yamibuy and Amazon)

### **AI Blackjack Game**

Trained AI players on RL alg and deep network to learn card counting with a win rate of 52% (beating average Blackjack win rate)

### **Autonomous Driving**

Trained car to drive on a mountain landscape on Microsoft Airsim environment using Actor Critics PPO and DFO on images.

### **Man sitting on the Moon model**

Built Ray Tracer to render a human model on the moon terrain from NASA.

## ENGINEERING EXPERIENCE

### **Cup Robotics Project Team**

Ithaca, NY

Team Member

Oct 2021-Feb 2023

- Collaborate with 70 team members in the design, manufacture, and assembling of robotics-oriented projects (Chatbot integrated with ChatGPT, GUI using React.js, Overhead Vision System with Apriltag)
- Design GUI that let users access the vision system, Chatbot, Physical blocky, and connect robots. Design Chatbot GUI that uses speech recognition and stores context using React.js and Python.
- Decrease Overhead Vision System's x, y, and angle offsets by 80% and improve the algorithm for locating Apriltag

### **United Building Sciences Limited**

Manhattan, NY

*Quality Control Inspector Intern*

April-Jun. 2021

- Analyze building blueprints, and check fire control, ventilation, and water sprinkler systems within 4 buildings in Midtown and Queens to ensure structural safety

## LEADERSHIP

### **Cornell University**

Ithaca, NY

Resident Advisor

Jan 2023-Present

- Led initiatives that celebrated cultural diversity, such as heritage month events, attended by an average of 30 residents
- Increased resident engagement by 50% after my first year through innovative programming and activities.
- Organized and led 4 events per semester, fostering connections among 160 residents and promoting a sense of belonging

## JOB EXPERIENCE

### **Hyatt Place**

Flushing, NY

Gallery Host Intern

Jun 2023-Aug 2023

- Assisted an average of 350 visitors per day with inquiries and provided information about the hotel.
- Assisted in maintaining accurate visitor logs and data entry, contributing to improved record-keeping efficiency.
- Successfully managed multiple tasks, such as attending to visitors, handling phone inquiries, managing kitchen staff, and assisting with event preparation, while consistently meeting deadlines

### **Math 1920 AEW Facilitator**

Ithaca, NY

Facilitator

Aug 2022-May 2023

- Review and prepare Multivariable Calculus materials weekly for a class of 22 students per semester.
- Increase the median of the student body enrolled in AEW session scores a median above the general class by 10%

### **United Postal Service**

Bayside, NY

*Sales Associate*

Jun - Aug. 2021

- Managed the CMS system in order to process 150 shipments from Amazon returns to shipping of high-values
- Organized 300 customers' mails/packages daily into respective mailboxes to ensure customer satisfaction.

## SPECIALIZED SKILLS

**Languages:** Cantonese (Fluent), English (Fluent), Mandarin (Proficient), Korean (Intermediate)

**Programming Languages:** Python, OCaml, Java, C, HTML, CSS, Javascript, ReactJS, TypeScript

**Tools:** Git, XCode, AutoCAD, Inventor, Eclipse, Visual Studio Code, Jupyter, ClimpChamp, Blender