Adam H. Kan

EXPERIENCE

Interactive Perception and Robot Learning Lab, Stanford (Bohg Lab) - Full-Time Computer Vision Research Intern

June 2023 - August 2023

- Led my own formal computer vision research project for application in household robots
- Developed novel machine learning model utilizing an object detection and CNN pipeline to complete the task of unfolding cloths
- Achieved an 80% success rate improvement on the leading alternative method (developed by researchers and Columbia University)

Interactive Perception and Robot Learning Lab, Stanford (Bohg Lab) - Part-Time Computer Vision Research Intern

September 2022 - March 2023

- Coauthored <u>TidyBot</u> research paper (Cited by 300+), presented at the International Conference on Robotics and Automation in June 2023
- Developed modifications to ViLD object detection model with Wordnet and other semantic hierarchies to establish baseline performance for classification of previously unseen objects
- Researched and tested existing object detection models to find the models with the highest accuracy for detecting household objects

${\bf Peninsula\ Bridge,\ San\ Mateo,\ CA-\it Math\ Teacher's\ Assistant}$

June 2022 - December 2022

- Independently planned and taught an introductory programming course to a class of 5th grade students
- Mentored underserved 4th-6th grade students in classroom and one-on-one environments

HERO Tent, CA — Policy Intern

January 2022 - March 2022

- Identified improvement areas for the California Child Protective Services program and provided community-oriented alternatives
- Wrote, edited, and submitted a policy brief that was accepted by the Oakland Reimagining Public Safety Commission

PROJECTS

Playing Card Classification CNN

April 2023

- Built, trained, and tested a convolutional neural network in Python using PyTorch to classify images of playing cards by suit and rank
- CNN achieved an accuracy of 56%, significantly higher than a random baseline given 52 possible categories

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LinkedIn

EDUCATION

Carnegie Mellon University School of Computer Science, B.S. in Computer Science Class of 2028

GPA: 4.0

Relevant Coursework: Fundamentals of Programming and Computer Science, Differential and Integral Calculus

Organizations:

TechNights, Alexander Hamilton Society, CMU AI, Data Science Club

The Nueva School, San Mateo, CA - Class of 2024

Relevant Coursework: Data Science, Computer Vision, Software Engineering, Advanced Machine Learning, Computer Internals, Linear Algebra

AWARDS

- Parliamentary Debate National Champion, won the Tournament of Champions for the 2022-23 school year
- USACO (USA Coding Olympiad)
 Silver, USACO competitor from 2020-2022

LEADERSHIP

- Outreach Director for The Nueva School Parliamentary Debate Team
- Co-Founder of The Nueva School Sailing Team

SOFTWARE PROFICIENCY

- Java
- Python
 - PyTorch
- JavaScript
 - React
- C++