Kevin Cui

https://www.linkedin.com/in/kevinkcui
kc734@cornell.edu

EDUCATION

Cornell University, College of Engineering, Ithaca, NY **Expected May 2025**
M. Eng. in Computer Science; B.S. in Computer Science (2024)
GPA: 4.04/4
Relevant Courses: Machine Learning, Functional Programming in OCaml, Analysis of Algorithms, Honors Object-Oriented Design & Data Structures, Operating Systems

PROFESSIONAL EXPERIENCE

METEOR Studio, Tempe, AZ, *REU Intern* **May - Aug. 2023**
- Designed adaptive viewport optimizations for a volumetric streaming pipeline
- Integrated spatio-temporal filters into a 3D point cloud rendering system for VR applications

Cornell Institute for Compensation Studies, Remote, *Undergraduate IT Consultant* **Feb. 2022 - Jan 2023**
- Improved relational database build scripts of public nonprofit data from millions of 990 form e-files
- Standardized employee titles for future research through fuzzy matching on compensation data
- Invented research-ready public packages in R for relational table building and title taxonomy

LEADERSHIP EXPERIENCE

AutoBoat Project Team, Cornell University, *Computer Vision Lead* **Jan. 2023 - Present**
- Lead weekly subteam meetings with twenty members to delegate responsibilities and manage perception projects
- Compose documentation for image annotation, model training, and new member onboarding
- Collected and annotated 6000+ images for training of boat's YOLOv5 custom object detection model and implemented algorithms in Python for autonomous navigation tasks

TEACHING EXPERIENCE

Cornell Bowers CIS
CS 3410, Computer Systems Organization and Programming, *Teaching Assistant* **Aug. 2023 - Present**
CS 2800, Discrete Structures, *CUES Tutor* **Jan. - May 2023**
CS 2112, Honors Objected Oriented Design and Programming, *Teaching Assistant* **Aug. - Dec. 2022**

SELECT PROJECTS

OCact-Chess, *CS 3110 Final Project* **Spring 2023**
- Collaborated in a group of four to create a terminal-based version of chess in OCaml from scratch
- Personally implemented user interface, king and major piece mechanics, and an exhaustive test suite

Critter World Simulation, *CS 2112 Final Project* **Fall 2021**
- Collaborated with two partners to produce a simulation of evolving critter life
- Personally built a recursive descent parser and interpreter in Java and implemented a GUI in JavaFX

Virulence Gene Study, *Summer Research at Villanova University* **Summer 2020**
- Led a five-member student team researching trends of virulence genes in AMR pathogens
- Performed principal component analysis and hierarchical clustering in R on NPDIB data

Karaoke Shazam, *Independent Research Project* **2018 - 2020**
- Created a program in Python to identify user-recorded audio using spectrographic analysis and a CNN

SPECIALIZED SKILLS

Programming: Java, Python, OCaml, R, C, C++, SQL, ROS, LaTex, Unity, Git, Agile
Languages: Mandarin Chinese (fluent); Spanish (working proficiency)