Xingtai Huang

New York, NY | 646-335-7852 | xh457@cornell.edu
linkedin.com/in/xingtai-huang | github.com/OHXTO/

EDUCATION

Cornell Tech, Cornell University New York, NY
MEng in Electrical and Computer Engineering, GPA 3.87, Merit Scholarship Expected May 2026
Relevant Coursework: Applied Machine Learning (coursework), HCI Design, Intelligent Autonomous Systems
Human-Robot Interaction, Productizing Machine Learning

Syracuse University Syracuse, NY
BS in Electrical Engineering, GPA: 3.88, Annual Dean's Scholarship, Invest in Success Scholarship Dec 2024
Relevant Coursework: Systems & Network Programming (sockets, concurrency, protocol basics)
Object-Oriented Design, Mathematical Statistics, Intro to Virtual Reality

TECHNICAL SKILLS

Coding Languages: C, Python | **CS:** Data Structures & Algorithms, Operating Systems
Algorithms: arrays/hash maps, two pointers, binary search, stacks/queues, sliding window, linked lists, trees (BFS/DFS)
Tools: Linux, Jupyter, ROS2
Libraries: scikit-learn, pandas, numpy

SELECTED PROJECTS

Multithreaded TCP Client–Server Echo, (C / Winsock) [GitHub] Feb 2026
Built a multithreaded TCP echo server/client on Windows using Winsock.
- Built a TCP client/server in C using Winsock, covering bind/listen/accept/connect, send/recv.
- Enabled multi-client concurrency by spawning one thread per connection (CreateThread) and validated correct echo behavior with multiple simultaneous clients.

Disaster Tweet Classification with NLP, (Python / Logistic Regression) [GitHub] Jan 2026
Built a disaster-related tweets classifier from raw social media text.
- Implemented a Python text-classification pipeline (preprocessing → text vectorization → training / evaluation) for disaster tweet detection, using scikit-learn CountVectorizer n-gram features (1–2, min_df=2, max_features=5000).
- Compared unigram vs. unigram+bigram features and regularization options (none/L1/L2) on a held-out dev set; selected L2 for best F1/accuracy.
- Tuned L2 regularization strength (C=0.3) to improve F1/accuracy; achieved a 0.796 Kaggle public score; visualized top 10 positive/negative tokens to explain predictions.

LoopMind – Route Optimization Product Concept, (Product Studio) Cornell Tech Fall 2025
Team of 4; designed a truck route-optimization product concept from discovery to prototype
- Designed a multi-stop routing product from 0→1—interviewed trucking stakeholders, mapped workflows, narrowed 80+ ideas to a core concept, and built an interactive Figma prototype (driver app + fleet dashboard) presented at Maker Days.

Self-Balancing Robot, (ItsyBitsy M4 / Arduino C) [GitHub] Spring 2024
Team of 3; built a self-balancing car from scratch to demonstrate IMU-based closed-loop control.
- Programmed Arduino C control firmware to read BNO055 tilt (gravity-X) feedback and run a PID control loop to drive wheel speed/direction via PWM/DIR (tilt detected by IMU → PID → wheels move to counter tilt); maintained stable balance on a flat floor.
- Tuned PID gains through iterative testing to reduce oscillation (~40%) and improve recovery from small pushes under varying floor friction.
- Logged timing, tilt angle, and motor commands on Serial Monitor; enabled quicker tests and easier debugging.
- Demonstrated stable balancing at the department exhibition; received positive feedback from visitors and faculty.

LEADERSHIP & EXTRACURRICULARS

Cornell Tech, Student Ambassador, New York, NY Sep 2025–Present
- Supported Admissions webinar (~40 prospects); live Q&A + email follow-ups; routed policy questions to Admissions.

Syracuse University Chinese Student Association, Publicity Designer, Syracuse, NY Sep 2022–Dec 2024
- Produced 2 event posters and 5 WeChat/Weibo social posts; refreshed the logo and designed an "I Orange SU" tote referencing SU's otto mascot and SU wordmark.