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), Human-Computer Interaction 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: Python, C, SQL (basic)
CS Fundamentals: Data Structures & Algorithms, Operating Systems, Networking, Multithreading
Tools: Linux, Git, ROS2, Alibaba Cloud ECS, Jupyter, VS Code | **Libraries:** scikit-learn, pandas, NumPy

SELECTED PROJECTS

Multithreaded TCP Client–Server System, (C / Socket) [GitHub]   Feb 2026
Built a multithreaded TCP echo server/client on Windows with Winsock2.
- Built a TCP/IP application in C, covering bind/listen/accept/connect and blocking send/recv messaging.
- Implemented a thread-per-connection server using CreateThread() to handle multiple client connections concurrently.
- Measured round-trip latency and throughput (10,000 iterations, 256B payload, using QueryPerformanceCounter): average RTT of 0.020 ms, 49,755 msgs/sec, and 24.29 MB/s (round-trip).

Gesture Recognition, (Python / HMM) [GitHub]   March 2026
Built a gesture recognition system using Hidden Markov Models to classify arm motion gestures from IMU sensor data.
- Preprocess raw IMU sensor data (gyroscope and accelerometer) with Python, applying K-means clustering (M=75 clusters) to convert continuous sensor data into discrete observation sequences.
- Engineered HMM training using the Baum-Welch algorithm (forward/backward calculation → E-step → M-step), selecting N=15 hidden states to model each gesture (Wave, Circle, Beat3, etc.)
- Calculated log-likelihoods for gesture classification, ranking predicted gestures based on top 3 highest likelihood scores.

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).
- Tested multiple feature sets (unigram vs. unigram+bigram), regularization options (None/L1/L2), and regularization strength C on a held-out dev set, selecting the best-performing model for better F1/accuracy.
- Achieved a 0.796 Kaggle public score and visualized the top 10 positive/negative tokens to explain predictions.

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

LEADERSHIP & EXTRACURRICULARS

Anote AI Academy   2026 Spring
- Participated in a weekly online AI program with project check-ins and feedback on applied AI development.
- Designed a personalized chatbot prototype using RAG and an LLM for document-grounded question answering.

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