Xingtai Huang

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

EDUCATION

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

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, Intro to Virtual Reality, Mathematical Statistics

TECHNICAL SKILLS

Coding Languages: C, Python
CS Fundamentals: 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 Notebook

SELECTED PROJECTS

Disaster Tweet Classification with NLP, (Python / Logistic Regression)   Jan 2026
Built an end-to-end text classification pipeline to identify disaster-related tweets from raw social media text.
- Preprocessed tweet text (lowercasing, URLs/username removal, lemmatization, etc.) and extracted Bag-of-Words features (unigram and ngram_range=(1,2), min_df=2).
- Ran controlled comparisons on held-out dev set: tested unigram vs unigram+bigram features on Logistic Regression with no penalty, L1, and L2; selected L2 for better F1/accuracy performance.
- 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.

Self-Balancing Robot, (ItsyBitsy M4 / Arduino C) Syracuse University   Spring 2024
Team of 3; built a self-balancing car from scratch to demonstrate IMU-based closed-loop control.
- Used BNO055 tilt (gravity-X) as feedback and applied PID to drive wheel speed and direction via PWM/DIR; the robot stayed upright and recovered from small pushes on a flat floor.
- Tuned PID gains (Kp/Ki/Kd) via repeated experiments and observation to reduce oscillation and improve upright recovery (too soft → raise P; too jerky → raise I/D); tricky because the balance point and floor friction varied.
- Logged timing, tilt angle, and motor commands on Serial Monitor and implemented an applyPWM() helper; enabled quicker tests and easier debugging without extra tools; seen issues inside a fast loop with very limited I/O.
- Demonstrated at the department's exhibition: upright balance with push-recovery on flat floor; received positive feedback from visitors and faculty.

LoopMind - AI Multi-Stop Route Optimization (Product Studio) Cornell Tech   Fall 2025
Team of 4 (ECE, CS, DSDA); designed an AI truck route-optimization product concept to reduce travel time and fuel costs.
- Conducted domain research and interviews across supply-chain trucking; mapped routing workflows and stakeholders; identified key pain points (detention time, empty miles) that reduce fleet utilization and driver income.
- Brainstormed and prioritized 80+ product ideas; applied structured selection and risk analysis; converged on multi-leg (A-B-C) route planning as the most feasible lever to reduce empty miles; validated assumptions via user observation, and pricing A/B tests.
- Built an interactive UI prototype (driver app, fleet dashboard) to simulate multi-stop routing and workflows; presented at Maker Days; iterated the product based on coach/advisor feedback;

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.