James Huang

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EDUCATION

09/2023 – 05/2027 New York University, NY Major: Computer Science GPA: 3.9

TECHNICAL SKILLS

- Programming Languages: C++, C, Java, Python, Assembly, HTML, JavaScript, SQL
- Skills: VS debugger, gdb, lldb, gcc, g++, cl, llvm, Data Structures and Algorithms, OOP, Distributed Systems, Socket Programming, Multi-threaded programming, Machine Learning, Tensorflow, CNN, Resnet, Transformers, Database, 3D modelling, Apache2, Docker, DBeaver, VS Code, Eclipse, IntelliJ, Git/GitHubDesktop, Azure, LaTeX, tmux, vi, nano, etc.
- Platforms: MacOS, Linux, Windows

HONORS & AWARDS

2023-2025 Dean's List, New York University

June 2022 First Place Team Award, American Regions Mathematics League (ARML/IRML)

April 2022 Paper Accepted by *International Conference on Artificial Intelligence and Computer Science (AICS2022): A Novel Approach For Analysis and Understanding of Video Content*

EXPERIENCE

Summer 2025 Software Design Engineer Intern (OPE), Microsoft AI Division, Microsoft Corp.
Designed and implemented **PulseAI**, an AI insight platform that aggregates news, products, and models, analyzes public sentiments (Huggingface, ProductHunt, YouTube), and generates business ideas from social trends (Reddit, Discord, X); partnered with Copilot Lab's social listening team on user feedback (Copilot Lab 3D)

Spring 2025 Simulated an eStore using multi-threading and C++, a virtual memory system in C

Fall 2024 Designed and implemented a simulated virtual memory system (TLB/Cache/Mem) in C

Summer 2024 Built james.huangs.nets.hk using Azure, ubuntu image, DNS registration, Apache2;
Built mysql databases on linux/mac using docker, with java/c++/python clients

Fall 2023 Designed and implemented two serious games: SpaceExploration & Central Dogma of Life, using java, 3D, async programming, etc

2021-2021 Software Design Engineer Intern, AI core team, Airdoc Corp. (HK: 02251.HK)
Coded and compared 2 AI models (Resnet50 and ViT) using Kaggle diabetic-retinopathy-detection dataset: ViT performs better (+10% auc) with blurry data (EE)

2021-2021 Independent Researcher on Video Content Analysis.
Developed an innovative model that takes a video & keywords to produce a trailer; used Resnet, Attention LSTM, audio API; published results at AICS2022

2021-2021 Independent Researcher and Designer of Smart Cane
Designed and implemented a smart cane for the blind, by detecting objects and warning with raspberry pi4B, Google CoCo model, cam, ultrasonic sensor

HOBBIES -- Drum, Piano, Flute, Ultimate Frisbee, Swimming, Football, Pingpong, Badminton

PERSONAL INFO -- Born in Seattle, WA; US Citizen