James Huang

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jameshuang2004.github.io/www/ james.huangs.nets.hk

EDUCATION

09/2023 – 05/2027 New York University, NY Major: Computer Science GPA: 3.96

TECHNICAL SKILLS

- Programming Languages: Java, C++/C, Python, SQL, HTML, JavaScript, Bash, Processing
- 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, etc
- Platforms: Mac-OS, Linux, Windows

HONORS & AWARDS

2023-2024 Dean's List, New York University

April 2023 High School Achievement Awards: Grade 12 Theory of Knowledge Award

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*

June 2021 Grade 10 Mathematics Award

EXPERIENCE

June 2024 built james.huangs.nets.hk using Azure, ubuntu image, DNS registration, Apache2, etc

Aug 2024 built mysql databases on both linux and mac machines using docker, latest MySQL image, SQL, DBeaver; coded up java, c++, and python clients to interact with the DBs

2021-2024 Software Design Engineer Intern, AI core team, Airdoc Corp. (HK: 02251.HK)
Worked on deep learning models to predict diseases (diabetes, hypertension, glaucoma, dementia, etc) based on 3.7M patients' retinal imaging data

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

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

2021-2022 Independent Researcher on AI Model Comparison
Coded and compared 2 AI models (Resnet50 and ViT) using Kaggle diabetic-retinopathy-detection dataset: ViT performs better (+10% auc) with blurry data

PERSONAL INFO

– U.S. Citizen, born in Seattle, WA; Hobbies: Drum, Piano, Flute, Ultimate Frisbee, Swimming, American Football, Ping-pong, Basketball, Badminton, Steam Games