

James Huang

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Education

- 04/2016 -- 06/2023 **International School of Beijing**, Shunyi District, Beijing, China.
Grade 5-12, IBDP (expected).
- 09/2011 -- 04/2016 **Zhongguancun No.4 Elementary School**, Haidian District, Beijing
Grade 1-5
- 09/2007 -- 12/2009 **Early World Children's School**, Bellevue, WA, USA

Honors and Awards

- 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
- Dec 2020 Honorary Credential by HongDanDan Charity Center for helping the visually impaired
- Dec 2019 The Principal's List

Activities

- 2021-2022 Software Design Engineer Intern, Airdoc Corp. (HK: 02251.HK)
Developed deep learning models to predict diseases (diabetes, glaucoma, dementia) based on 3.7M patients' retinal imaging data; gathered user feedback
- 2020-2023 HongDanDan Charity Center for the Visually Impaired
Initiated a team of 5 to help blind kids enjoy literature books; leveraged & fine-tuned Microsoft Text-to-Speech tech by working closely with TTS team
- 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
- 2019-2023 Team member, ISB Swimming Team
- 2019-2020 Drummer, Fly" Band @ ISB
- 2021-2022 High School Peer Mentor; ISB Robotics Club

Hobbies

Music: Drum, Piano, Flute

Sports: Ultimate Frisbee, Swimming, American Football, Ping-pong, Basketball, Badminton