Andy Kong

https://andykong.org
akong@andrew.cmu.edu

RESEARCH FOCUS

My interests include intuitive device interactions, neural interfaces, and sensing

EDUCATION

Carnegie Mellon University | Pittsburgh, PA

August 2018 - now | **B.S. Computer Science**, minor in Human-Computer Interaction

GPA: **3.6/4.0**

PROFESSIONAL EXPERIENCE

Future Interfaces Group | Research Assistant | February 2020 ➡ now

- ➤ Wrote Java applet for processing 6 audio channels from a microphone array simultaneously
- ➤ Trained a novel, one-shot eye tracking model using a 2.4 million image dataset
- ➤ Adapted machine learning model architectures to run in real-time on constrained hardware

Kura AR | R&D Intern | May ➡ August 2020

- ➤ Constructed high-resolution AR demos with Unity to showcase AR headset's capabilities
- ➤ Designed and built custom analog driver circuits for lasers and motors

MIT Lincoln Laboratory | Bioengineering Intern | May ➡ August 2019

- ➤ Taught Medlytics course at the BeaverWorks Summer Institute, introducing Python, statistics, and machine learning to 20+ high school students through the lens of medicine
- ➤ Analyzed genetic and biological data for predicting hereditary and population-level disease

Cylab | Research Assistant | January ➡ May 2019

- ➤ Integrated on-board smartphone sensors with a particle filter and ground-truth landmarks to accurately track user location in GPS-restricted environments

PUBLICATIONS

1. Karan Ahuja, **Andy Kong**, Mayank Goel and Chris Harrison. 2020. <u>Direction-of-Voice (DoV) Estimation for Intuitive Speech Interaction with Smart Devices Ecosystems.</u> In Proceedings of the 33rd Annual ACM Symposium on User Interface Software and Technology (UIST '20). Association for Computing Machinery, New York, NY, USA.

PATENTS

1. K Ahuja, A Kong, M Goel, and C Harrison. Direction-of-Voice (DoV) Estimation for Intuitive Speech Interaction with Smart Devices Ecosystems. Filed June 10, 2020.

REFERENCES

Mark Stehlik   School of Computer Science Teaching Professor at Carnegie Mellon University

Chris Harrison   Future Interfaces Group Director, Associate Professor at Carnegie Mellon University

HOBBIES

Folding dumplings, playing Tetris, doing science.