

Runze Liu

E-mail: knightr77@163.com ※ rml6043@psu.edu
Tel: US: +1-949-501-6423 CN: +86-151-5469-6289
Address: W362 Westgate, University Park, PA 16802

EDUCATION

Pennsylvania State University	2022 - Present
• Ph.D. in Computer Science	
Case Western Reserve University	2020 - 2022
• M.S. in Computer Engineering	Course-Focused Track
University of California, Irvine	2016 - 2020
• B.S. in Computer Science	Intelligent System Specialization

SKILLS

Proficient in:

Software: C/C++, Python, Java, Machine Learning, Computer Vision, Natural Language Processing, Linux

Hardware: Embedded Systems (Arduino, ESP32, NRF5x Series etc.), EAGLE PCB, FPGA, VHDL

Mechanical: SOLIDOWRKS, 3D Printing oriented designs.

Basic in: VLSI Circuit and Layout, Robotics, Wireless Communication, Networking, MATLAB, Algorithms, Security, GLSL 3D programing.

PROFESSIONAL EXPERIENCE

Karpos Cultivation LLC. Dec 2020-Aug 2022

Co-Founder & Lead Hardware Engineer

- Karpos is a startup company established Irvine, California, focusing on revolutionary in-door planting technologies that combines AI prediction and scheduling, automation and Internet-of-Things communication.

Hardware Design and Firmware Design

Mechanical Design

AI Modeling and Data Collection

PUBLICATIONS

SmartDampener: An Open Source Platform for Sport Analytics in Tennis

Runze Liu, Taiting Lu, Shengming Yuan, Hao Zhou, Mahanth Gowda ACM IMWUT/UbiComp, 2024

One Ring to Rule Them All: An Open Source Smartring Platform for Finger Motion Analytics and Healthcare Applications

Hao Zhou, Taiting Lu, Yilin Liu, Shijia Zhang, Runze Liu, Mahanth Gowda. ACM/IEEE IoTDI, 2023

I am an Earphone and I can Hear my Users Face: Facial Landmark Tracking using Smart Earphones

Shijia Zhang, Taiting Lu, Hao Zhou, Yilin Liu, Runze Liu, Mahanth Gowda ACM TIOT, 2023

ACTIVITIES

Hardware Club at UCI (Now Computer Hardware Club) May 2017- June 2020

Co-founder & Vice President

- Gathered students who love or skilled in hardware, electronic engineering, designing, and creating to conduct specialized projects.