SIG - IIIs for VIPs

IIIs for VIPs is an SIG collaborating with our supervisor Dr. Joseph Chan. It aims to provide a space where students can create inventions which help improve the daily lives of visually impaired persons (VIPs). We welcome students from engineering, medicine and interested students from other faculties.

Our SIG will support our members in finishing their projects until it becomes available for public use. Any project with the purpose of improving the activities of daily living for VIPs are welcome.

SIG – PERFECT Wearables for Digital Health

Internet of things (IoT) has attracted huge attention because of its potential to connect things together with the cloud. Similarly, the Internet of Health (IoH) aims to enable real-time health evaluation of an individual or a group with advanced medical devices. This feat can be realized by developing tiny wearable biosensors that can be easily deployed on the human body to monitor health signals. This project develops next-generation wearable biosensors to allow digital healthcare. There are two main components. First, we develop skin-attachable biosensors which detect health signals including electrophysiological signals, temperature, and antibodies or glucose in the sweat. Second, we develop miniaturized sensor characterization systems to enable comfort wear for practical applications. The whole set can communicate the data wirelessly with other electronic devices. This will be one of the smallest wearable devices developed so far. Future research is being conducted by our group at the innovation wing now at HKU.

SIG – HKU Robocon

The annual Robocon competition project allows HKU engineering students from different disciplines to design and fabricate innovative robots with an integration of various advanced technologies, including IoT sensors, AI, computer vision, and mobile computing. Besides, it provides hands-on experiences on product design, prototyping, CNC machining, design and fabrication of electric circuit and PCB, control program development, etc.

Membership

- Membership of Innovation Wing, once approved, will be effective until graduation.
- Only registered members of Innovation Wing are permitted to access to its facilities, equipment and services with his/her HKU student/staff card.
- Please go through the following three steps (namely Registration, Deposit Payment, and General Safety Training) before granting access to the Innovation Wing.

Step 1. Registration

Eligibility:

Undergraduate students and academic staff in the Faculty of Engineering.