

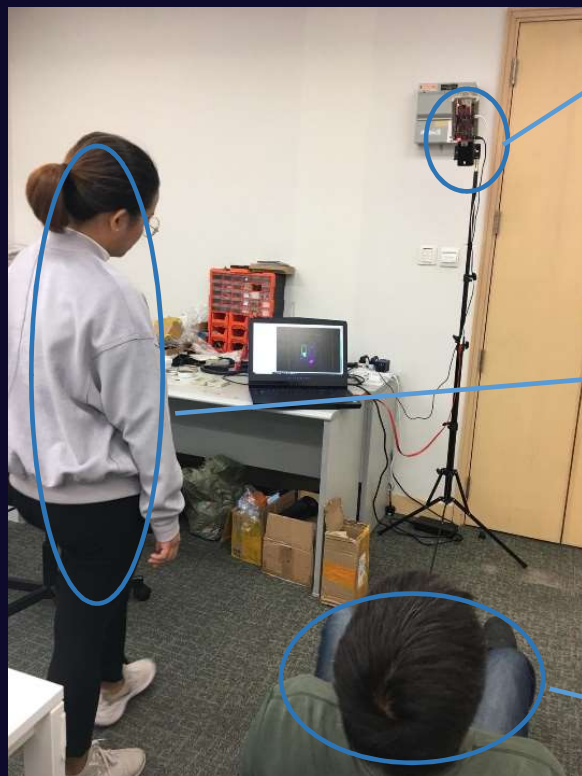


**KING CITY**

Build for the Future

# Core Technology

Position tracking - 3D object motion tracking device without images

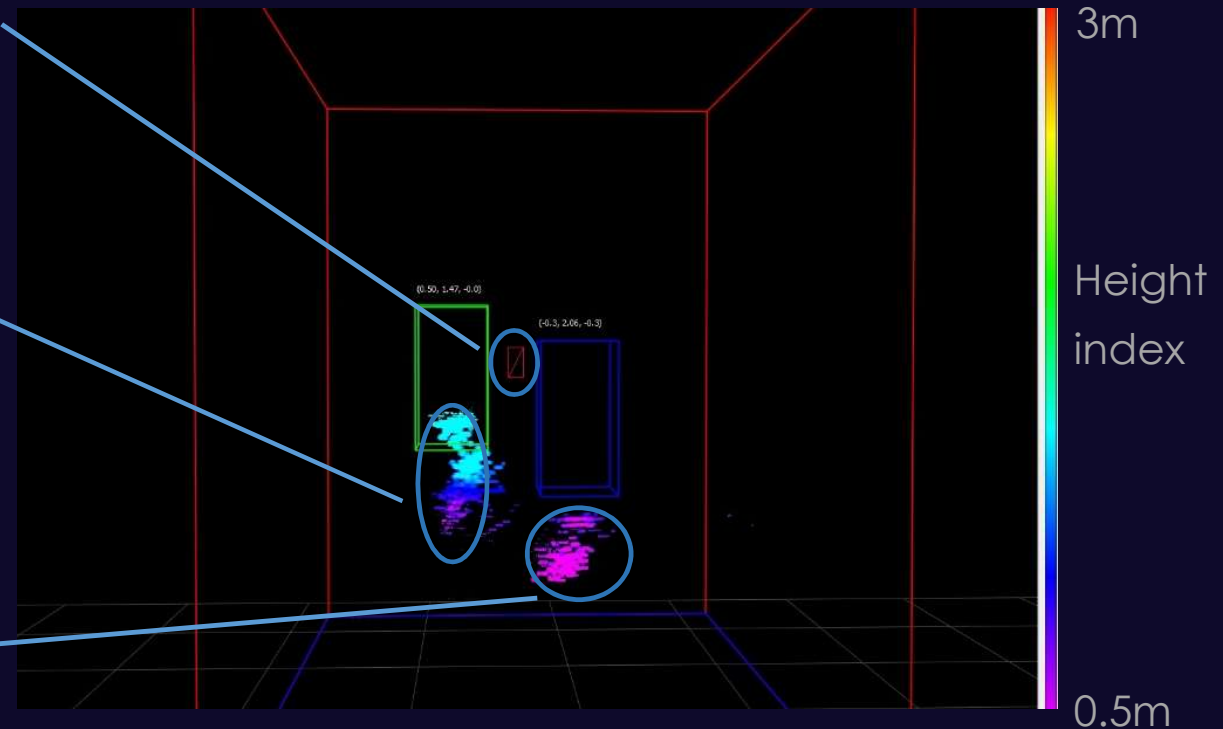


Radar sensor

Target1

Target2

Front view





# Core Technology

Position tracking - 3D object motion tracking device without images



- 3D position tracking
- Stay time counting
- Social distancing

# Core Technology

We develop 24/77GHz motion tracking algorithms and products. Products are focused on human body movement



People Flow



Toilet usage

24GHz radar/Object Detection



Accident detection



Motion tracking

77GHz radar/Motion Tracking

# Use case (1)

## People Flow Management



HKSTP



Sino Plaza

### Description

- Building in/out flow management
- HKIA toilet usage versus flight schedule
- Lecture room/meeting room usage

### Working scenario

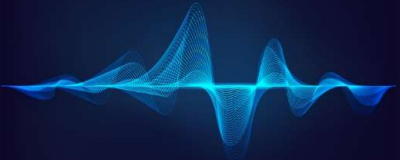
- Hong Kong Science Park
- Sino Plaza
- HKIA (PoC)



HKIA

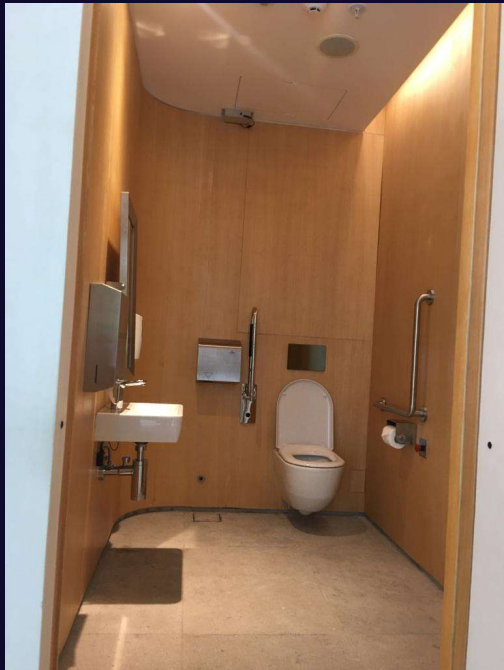






# Accident Detection

Disabled toilet @ Mount Pavilia



Toilet @ CIC office

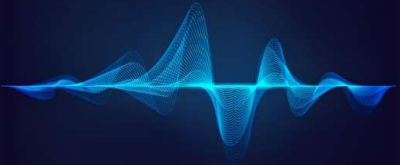


## Description

- toilet surveillance monitoring abnormal motion
- Fall down accident/ Long stay without motions can be detected
- Head to head fighting

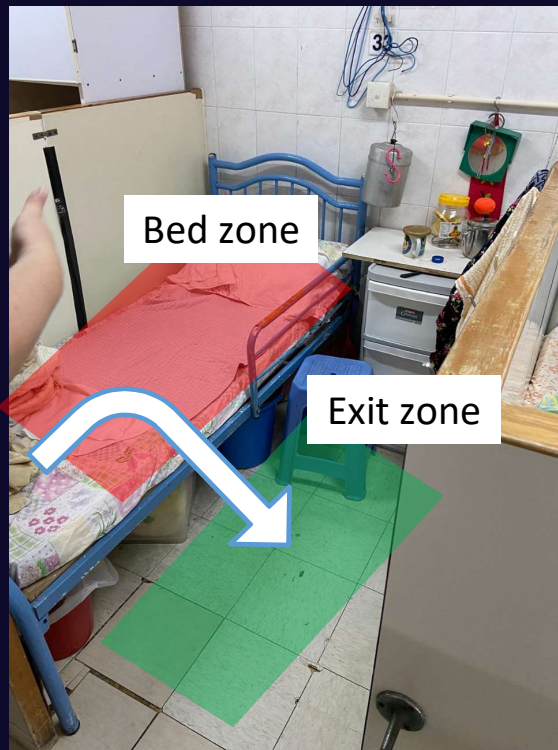
## Working scenario

- Disabled toilet/nursery room
- Hotel room
- Elderly center



# Accident Detection

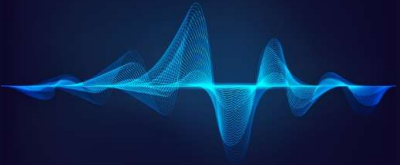
## Bed Exit Monitoring System



Define Bed Zone/Exit Zone

Motion Checking at night time

Alert for bed exit more than 30min



# Accident Detection

## Accident Alert System



Fall detection area

Define Detection Zone

Motion Checking at night time



# Motion tracking module spec

Module Details	
Dimension	160 x 100 x 56mm
Supply	220V, 3A
Temperature range	0 - 85 deg
Frequency Band	60 – 64 GHz
TX/RX	3TX / 4RX
Components	<ol style="list-style-type: none"> <li>1) 60GHz radar transceiver system</li> <li>2) Baseband analog unit</li> <li>3) Power control system</li> <li>4) Edge computing system for motion tracking algorithm</li> </ol>
Sensor Algorithm	<ol style="list-style-type: none"> <li>1) User position tracking algorithm</li> <li>2) User predefined motion monitoring</li> <li>3) User behavior analysis</li> </ol>
Response Time	100ms/frame
Field Of View	120 deg x-axis 120 deg y-axis
Coverage range	0.5m – 8m



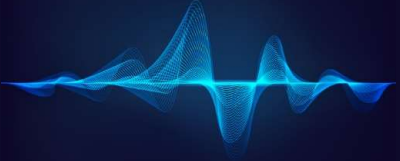
Module snapshot



In house testing snap



Real deployment snapshot



# Thank you

Contact: Gary Wong  
Email: [gary.wong@kingcitytech.com](mailto:gary.wong@kingcitytech.com)  
Mobile: +852-96423656