

# Nôdens medical

### **Al-driven People-Sensing Solutions**

Our patent-pending, Al-powered sensors can detect where people are and what they are doing. This is done without the use of privacy-invading cameras or intrusive wearable devices.



Who we are: Our leadership combines technology development and healthcare improvement experience



#### Dr. Khalid Rajab

**Co-founder & Technology Director** Radar, AI, EM expert with > 50 publications. Research feat. in international. Media Post-grad degrees in EE, Maths (Penn State)



#### Dr. Rishi Das-Gupta

**Co-founder & Medical Director** NHS Director (Operations and transformation and IT) Former management Consultant (McKinsey & Co.) Medical doctor (Cambridge/UCL), MBA (LBS)



Dr. Peter Alizadeh Hardware Lead MM-wave electronics expert Worked from RF to mm-wave and THz PhD in mm-wave electronics (QMUL)



## Dr. Zofia Das-Gupta

Operations Lead Healthcare improvement expert (Former: ICHOM director, UCLPartners improvement team) PhD in Immunology (UCL, Harvard)



## What we do: NodeNs sensors tell you where people are and what they are doing without using cameras

Our sensors...



#### Are easy and cheap to install:

sensor plugs into a wall outlet and creates a mesh Wi-Fi network. No wiring/network port is needed.

Preserve privacy:

generates a continuous mm-wave 'picture' of the room without cameras or video recording, allowing use in privacy-sensitive environments.



#### Are unintrusive:

no smartphones, tags or wearables.



### What we do: the NodeNs sensor in action...



https://youtu.be/70cylSv018M



How our technology works: Any number (N) of Nodes can be linked via our mesh network to scale across large areas

Each sensor works individually to monitor activity in a room but they can be linked...

The NodeNs sensors form a mesh network which is secure, robust, and connects IoT devices to a local server or the Cloud.





## How our technology works: The sensors recognise activity

The sensor generates a continuous mm-wave 'picture'

Al-processing is done on the chip to identify activity





This is really useful in areas where privacy is important





### How our technology works: Our approach harnesses edge processing





## NodeNs are looking for partners to access key markets in parallel

NodeNs was developed for hospitals where privacy is a key concern...



- Minimise infrastructure requirements and simplify installation
- Millimetre-wave sensing can 'see' where people are to within a few cm
- Artificial intelligence can predict what people are doing and improve data quality

## ...the technology is applicable to other areas as well such as



#### Homecare / remote monitoring



Social distancing / infection control



Smart buildings / hospital utilisation



## NodeNs is currently running three pilots to develop the real-world evidence base for these use cases



#### Homecare / remote monitoring

- We are preserve the independence of people living in a supported environment
- We have experience deploying the technology in home environments/ apartments and assisted living facility
- Information on activities of daily living and quality of sleep and alerts for mobility issues/inactivity/falls to help facility staff monitor residents and provide targeted care





## Social distancing / infection control

- We are able to support data- and evidencedriven reopening of offices and labs.
- We have experience setting up in work environments, with minimal interruption of occupants
- How many people are in a space? What is the occupancy distribution? Are people respecting social distancing? we can provide live notifications when occupancy levels or social distancing rules are violated.





#### Hospital utilisation / Smart buildings









## NodeNs are looking for partners to access additional markets and help scale the business

- NodeNs is one of only two UK partners recommended by Texas Instruments for mm-wave sensor development
- We can easily integrate into other platforms so far we have interfaced into TI, Siemens, Metrikus and Ascom systems
- We are seeking partners to help us access these markets via partnerships and licensing opportunities and scale-up funding for next 2-3 years







#### www.nodens.eu

For further details on the presentation and the company information please reach out to

Investor-relations@nodens.eu

