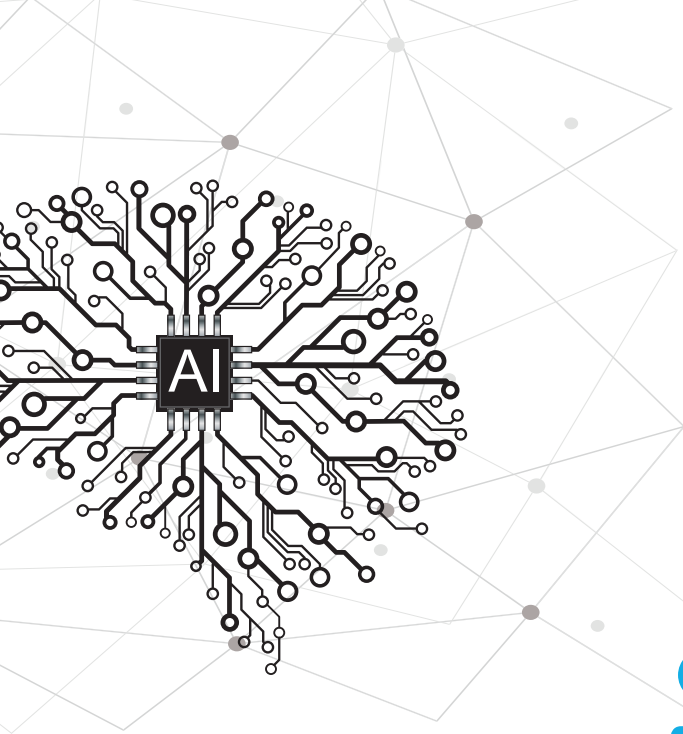


Emerging respiratory viruses, including

COVID-19



Smart Stethoscope
skeeper®





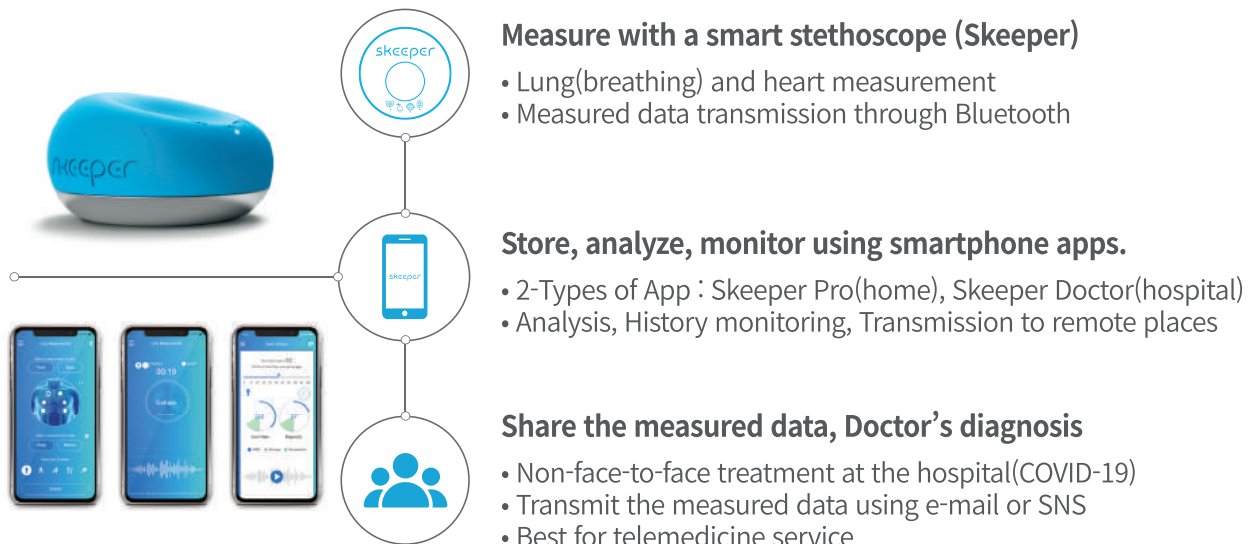
skeeper®

Smart Stethoscope
Optimized for
Non-Face-To-Face Measurement
(Tele-Medicine)

- IoT based Telemedicine Device
- A state-of-the-art precision stethoscope system for accurate measurement of human vital signals

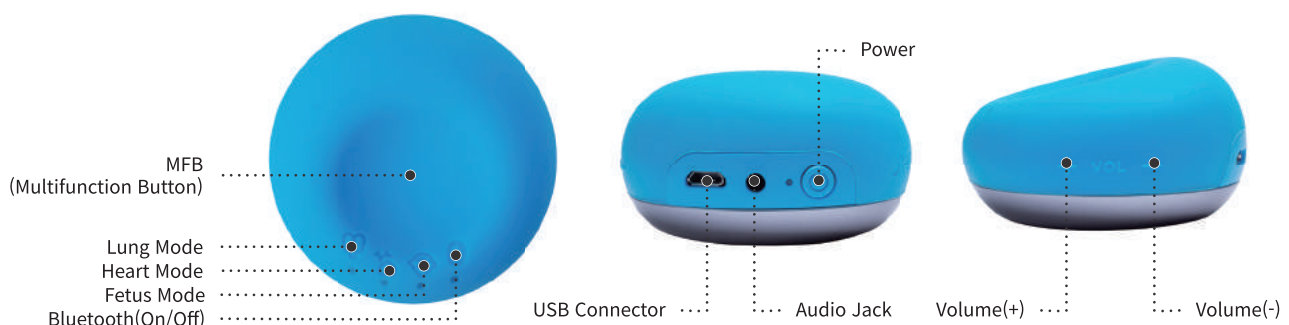


Main Functions



Product Specifications

Wireless Connection	Bluetooth	BLE 4.2
	Profile	HFP
Basic Specification	Size(W X L X H)	62mm X 62mm X 35mm, 40π
	Weight	53g
	Port	Micro USB, 3.5 Audio Jack
	Sensor Type	MEMS
Battery	Type	Rechargeable Lithium-Polymer
	Recharging Time	Approx. 3 Hours
	Hour of Battery Use	Approx. 8 Hours(Measurement)



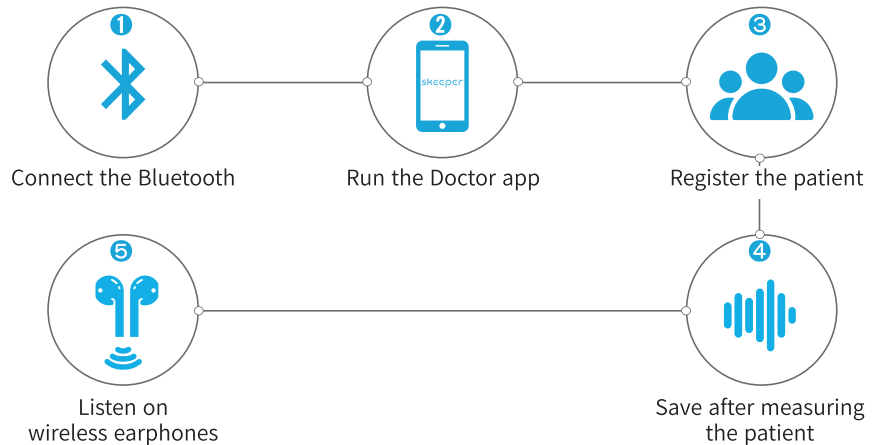


SKEEPER® Apps

- Measuring human body signals : Lung(Breathing), Heart
- Bluetooth communication between smart stethoscope and apps
- Pre-processing data with advanced sound processing algorithms.
- Digitalize, Visualize, Analyze
- 2-Types of applications : Skeeper Pro(home users), Skeeper Doctor(hospital users)

skeeper®
doctor

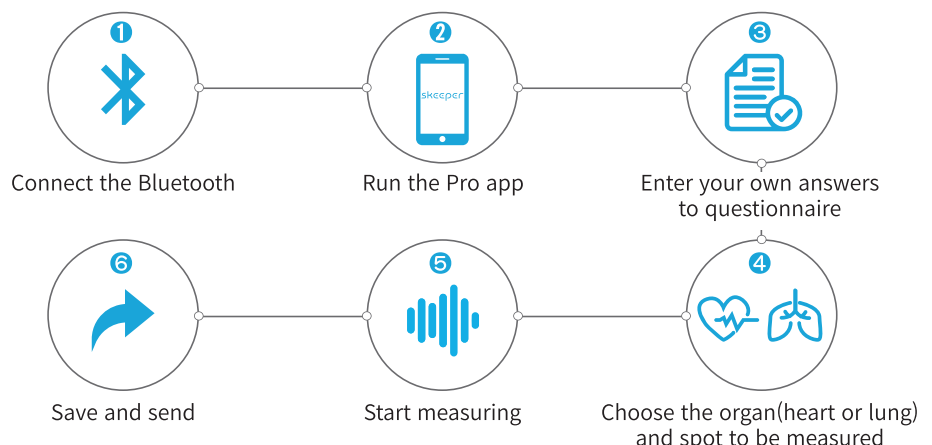
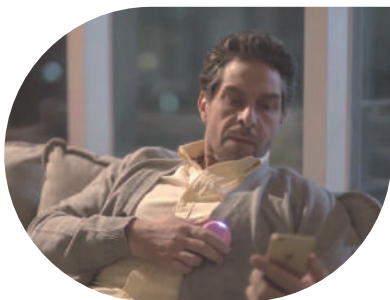
For non-face-to-face patients treatment at hospital



- 1 Connect smart stethoscope, smartphones, and wireless earphones through Bluetooth.
- 2 Run the Doctor app.
- 3 Register patient to measure.
- 4 Place smart stethoscope to measurement spot of the patient and check with app.
- 5 Listen to the measured sound on wireless earphones outside hospital room.

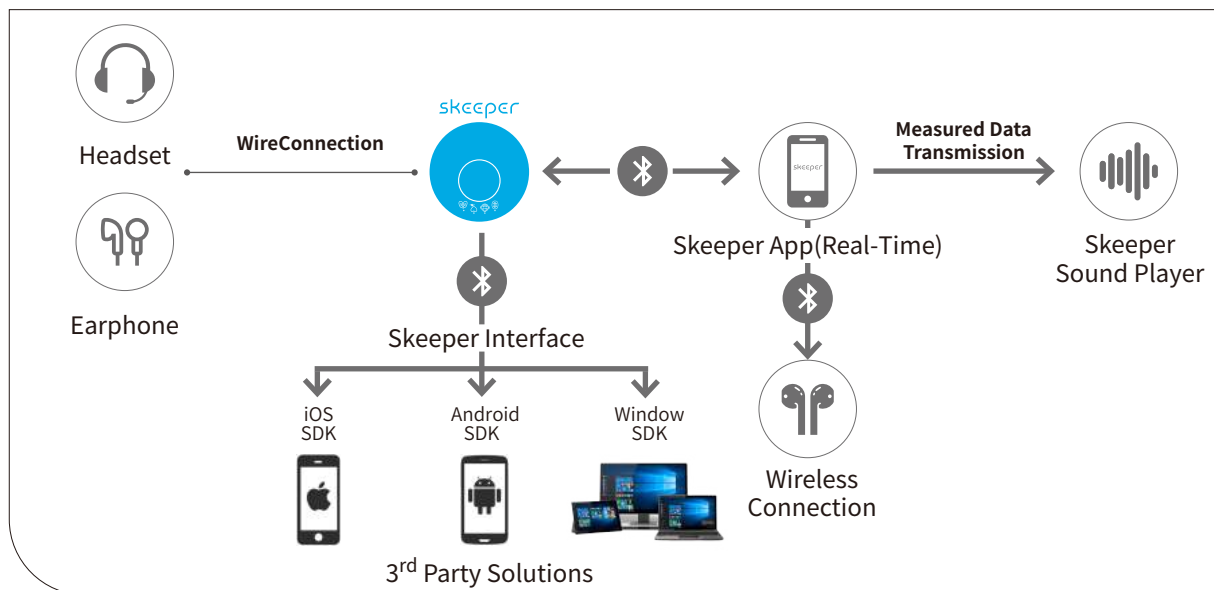
skeeper®
pro

For personal healthcare use and telemedicine at home



- 1 Connect smart stethoscope and smartphone through Bluetooth.
- 2 Run the Pro app.
- 3 Enter your own answers to questionnaire.
- 4 Choose heart or lung(breathing), then move to the measurement screen.
- 5 Choose the measuring spot and time duration, then press Start.
When measurement is complete, move to the measurement result screen.
- 6 Save the result and send it to doctor via email or SNS.
Record and manage the measurement result.

skeeper® System Structure

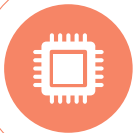


skeeper® Features



Advisory & Performance Evaluation from World-Class Medical Experts

- Respiratory/Cardiac Medical Experts Verification and Favorable Reviews in Korea's Top 5 Univ. Hospitals



Applied "Core Sound Processing Technology" (HSC™)

- Applied Patent Technology to Precisely Measure Human Sound Signals (Lung, Heart, Bronchial Tubes and Others)



Innovative Product Design Optimized for Telemedicine

- Portable
- Easy to Use (from Measurement to Remote Location)



Securing Stable Reliability of Measured Sound Data

- Maintain Data Consistency
- Reliability in the Entire Process of Measurement
- Storage/Analysis/Data Transmission



Recognized for Technology & Innovation by Global Competitions & Research Institutes

- USA NASA iTech 2020 Global Top 25 Selection
- Dubai GITEX 2019 Supernova Award Winner
- Singapore IoT Asia 2018 Trailblazer Innovation Award Winner

skeeper® SKEEPER Evaluation by Medical Professionals



- Suitable for respiratory medicine treatment.
- Easy & convenient to use application.
- **Non-face-to-face Auscultation is useful.**
- Necessary sounds for diagnosing lung diseases such as crackle, wheezing and others are well hearing.
- **In particular, Skeeper helped in applying the COVID-19 case.**
- **Multiple medical staffs can listen at the same time with one Skeeper.**
- After patients are treated at the hospital, Skeeper is useful tool for regular self-measurements and monitoring.

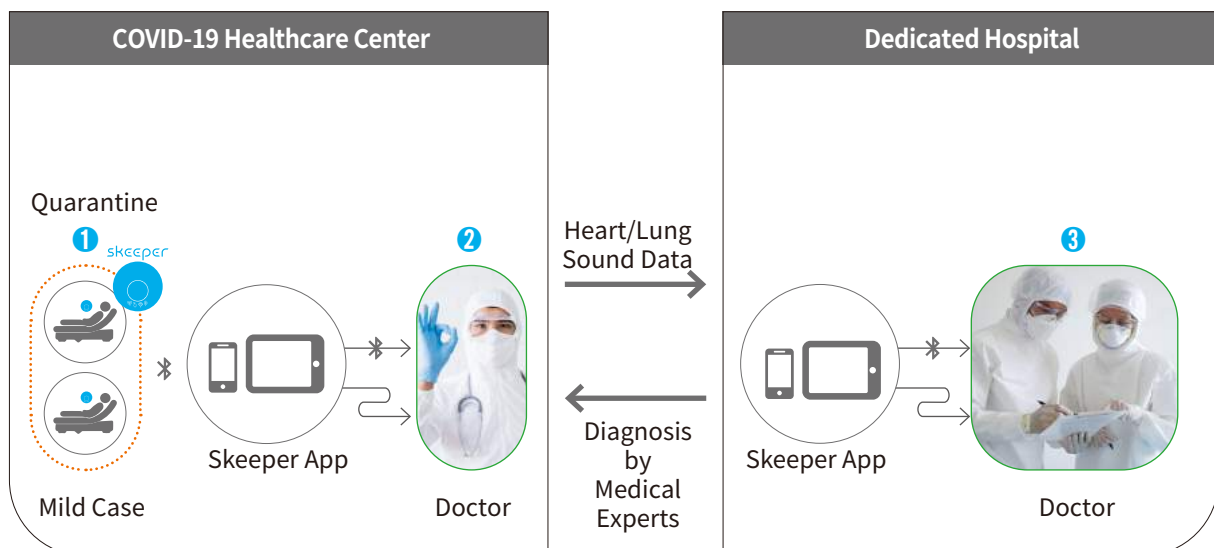
- Professor of Pulmonary Medicine, Seoul "K University Hospital" -



- Sound of Skeeper's auscultation can be used to **determine COVID-19 and other diseases.**
- **Useful for non-face-to-face auscultation.**
- Able to hear like a professional analog/digital stethoscope
- Great product for tele-medicine healthcare anytime, anywhere

- Professor of Cardiovascular at Seoul "S Hospital" -

skeeper® COVID-19 Application Scenario



- 1 Mild patients in COVID-19 quarantine facility who can measure and share their **medical examination**, temperature and **heart/lung sound data** to medical professionals by themselves.
- 2 If a **suspicious symptom of heart/lung sounds are detected**, medical professionals can share the data to other medical professionals for **group medicine**.
- 3 As a result of auscultation by the medical staffs of the dedicated hospital, if it is determined that **there are abnormal symptoms**, the patient is **immediately transferred to the dedicated hospital** for detailed examination and treatment.

SMARTSOUND

“ The Best Healthcare Technology ”

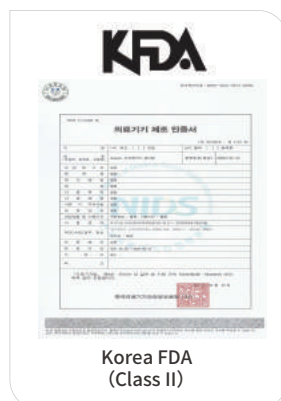
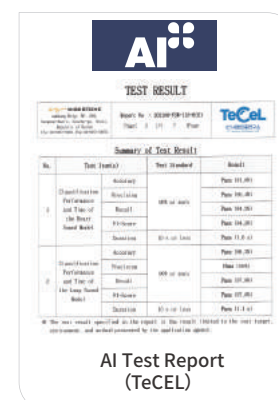
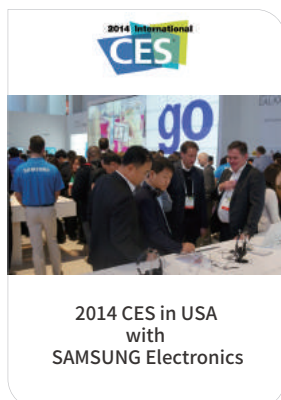
Smartsound Corporation was established in Nov 2011 with the vision of being **“the company with the World’s Best Smart Healthcare Products”**.

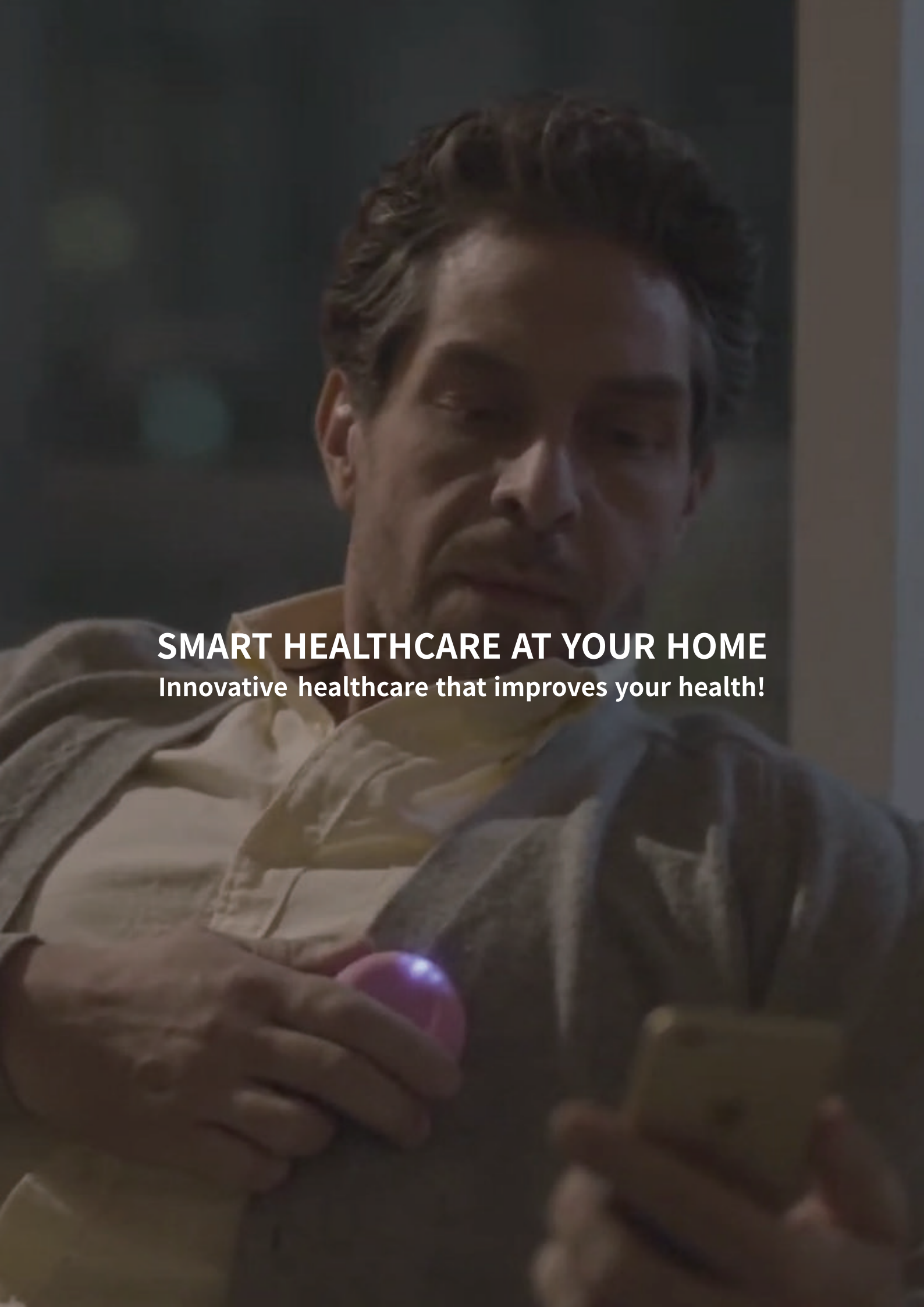
Based on our core **“Sound Processing Technology”**, we develop IoMT-based Smart Devices by combining various sensors that can measure human signals.

We collaborate with **leading medical professionals** to design and develop **Smart Algorithms** to provide personalized healthcare products specialized for the whole family. As of now, we have collected the feasible sound data by Skeeper to improve our **AI (XAI :eXplainable Artificial Intelligence) Algorithms**.

Keywords : IoMT (Internet of Medical Things), Cloud Server (Big Data), AI/Deep Learning

skeeper® Global Awards & Certifications



A man with dark, wavy hair, wearing a light-colored shirt and a dark blazer, is looking down at a glowing purple sphere he is holding in his right hand. In his left hand, he holds a smartphone. The background is dark and out of focus, with some bokeh light effects. The overall mood is mysterious and technological.

SMART HEALTHCARE AT YOUR HOME

Innovative healthcare that improves your health!



SMARTSOUND
will contribute to the promotion of
human health and happiness
through ceaseless R&D efforts.

SMARTSOUND

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