

Contactless Home Breath Monitor

Emerald Innovations, Inc.

Emerald

Passive, contactless mechanism to measure a variety of physiological metrics and vital signs such as:

- Gait
- Mobility
- Breathing
- Sleep Actigraphy
- Sleep Stages

Particularly beneficial to COVID-19 patients, enabling remoting monitoring of their vital signs, while minimizing contagion.



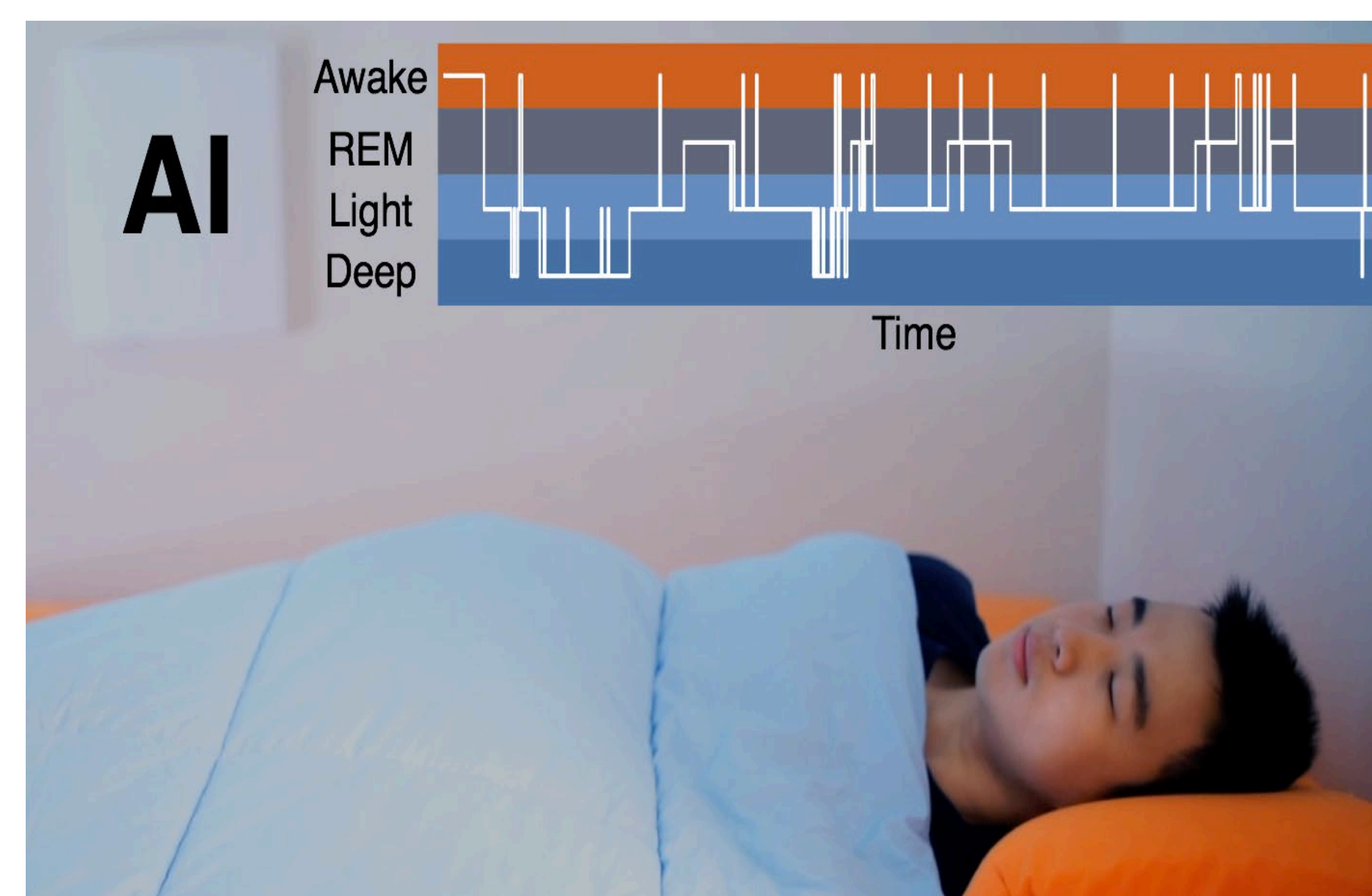
How Emerald Works

- Emerald Device sends out low power radio waves and receives the reflections of these signals from people and objects in the environment
- Uses signal processing and cloud based AI processing to derive a variety of health metrics
- Emerald measures health metrics as people live in their homes and go about their daily lives, without requiring them to modify their behavior in any way.

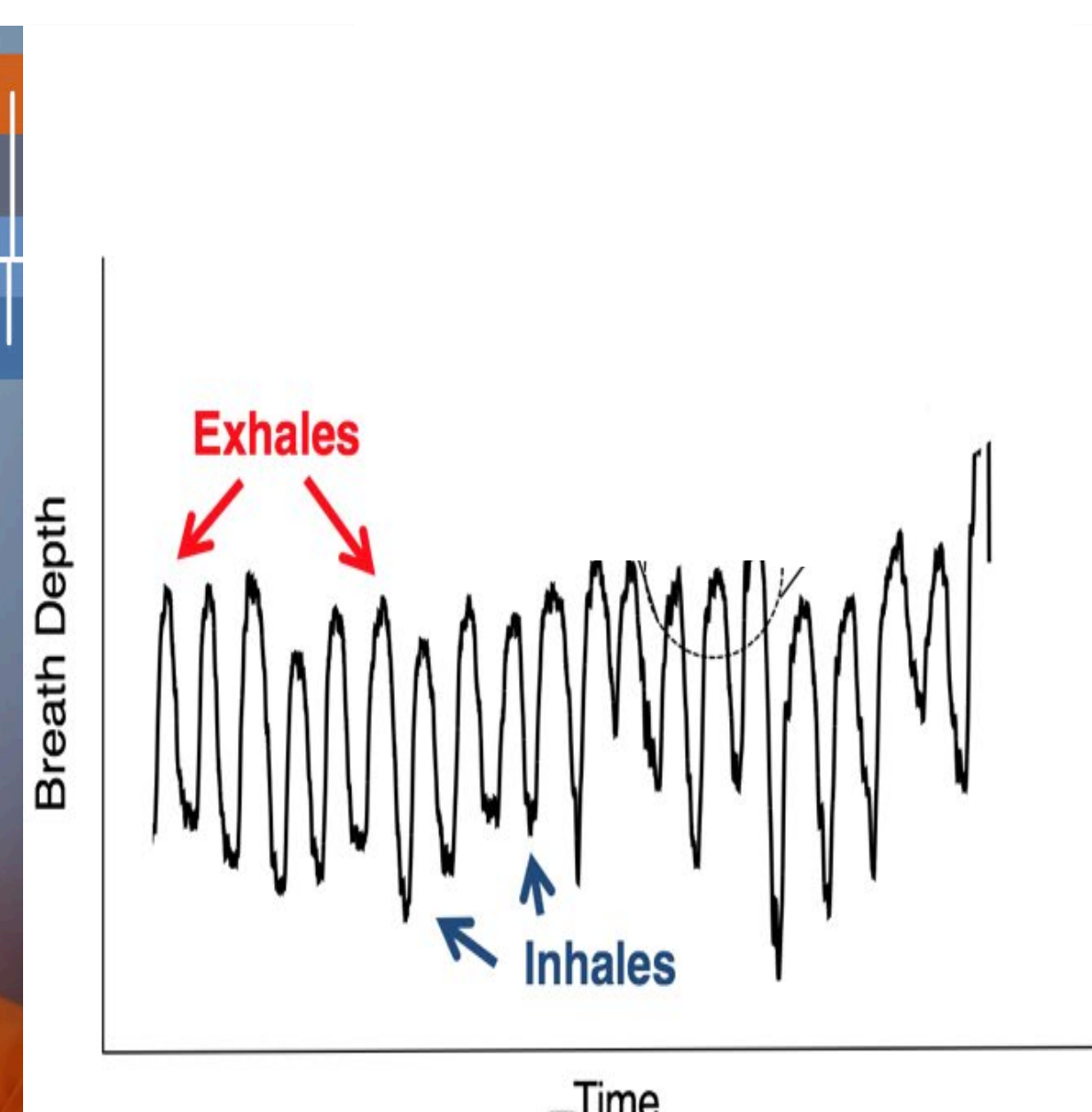
This Project: Enhance the Emerald system with the ability for patients to self-deploy Emerald devices using a mobile app, to enable remote monitoring of COVID-19 patients without requiring trained deployment staff

Summary

- Continuous and remote monitoring of COVID-19 patients' breathing and sleep is necessary to minimize the risk of contagion while still ensuring the health and safety of patients and caregivers.
- Emerald's passive and touchless monitoring of breathing and sleep is particularly beneficial for such patients.
- Emerald has been deployed by trained staff to monitor COVID-19 patients in homes and assisted living.
- In this project, Emerald will build a self-deployment app with remote assistance capabilities to allow participants to deploy in their homes without need for staff to enter patients' homes



Emerald monitors subjects' sleep stages as they sleep in their own beds, without needing any wearables



Emerald monitors the breathing of a seated subject, capturing their inhales, exhales and breathing rate, without needing any wearables.

