### Fourier Intelligence Global Partnership Network



# HandyRehab<sup>TM</sup> Intelligent Hand Rehabilitation Robotics



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# HandyRehab<sup>™</sup>

### Intelligent Hand Rehabilitation Robotics

HandyRehab<sup>™</sup> is an intelligent hand rehabilitation robotic glove that assists users to mobilise their fingers. Each finger can be actuated separately and when mobilised together, different hand gestures can be positioned.

# **Multiple Training Modes**

Fine finger motor skill training has always been the pain point of rehabilitation. HandyRehab<sup>™</sup> is equipped with 8 individual motors which allows it to carry out complex hand function training. The integration of EMG sensors can provide different training scenarios such as passive, active assistive as well as functional training.

















**Functional Training** 

Active Training



## Enjoy the Whole Training Process

An extensive library of interactive and customisable training modes can guide the user to complete fine finger motor skill training through audio and visual inputs, which can retain the user's interest and achieve rehabilitation purposes at the same time.



### Measurable Training

Rehabilitation robotics allow users to quantify their trainings. HandyRehab<sup>™</sup> integrates EMG sensor which tracks the user's active participation. The auto-generated training reports provide measurable results for the user's reference. This also helps a therapist to better understand the patient's condition hence providing better training outcomes.



## Various Training Scenarios

HandyRehab<sup>™</sup> can create various training scenarios by combining different gestures and training modes. The variety of the training scenarios can motivate the user to actively participate in the training.

#### Various Training Modes



It supports multiple hand function recovery trainings such as finger stretching, grasp, and finger opposition.

#### **Task Oriented Training**



It helps users to improve the skills needed for daily living and working. The light weight and wireless design allows users to undertake the task-oriented training with real-life objects.

#### Active Assistive Training



It assists movements upon detecting the user's intention to move. Many therapists find this highly encouraging for users.

### Data Monitoring



Equipped with the movement parameter tracking and key performance measuring features, which allows therapists to better track user's recovery progress.

## **Functional Training**

HandyRehab<sup>™</sup> helps users improve the skills needed for daily living and working. The lightweight and wireless design of the HandyRehab<sup>™</sup> assists users to improve and redevelop motor skills for daily living and working, by allowing them to carry out task-oriented training while interacting with real life objects. The HandyRehab™ also supports home use and can be used as an assistive device to improve an individual's quality of daily living.

## **Empowering You**

Fourier Intelligence is a technology-driven company, infusing creativity into the development of exoskeleton and rehabilitation robotics since 2015. Together with researchers, therapists and patients, we aim to excel in developing and redefining rehabilitation robotics solutions with interconnectable intelligent robotics technology by elevating user experience with an intuitive, easy-to-use system to enhance the lives of both patients and therapists.

### Fourier Global Research Joint Laboratories and Clinical Partners















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