Fourier Rehab Global Partnership Network











www.fftai.com

care@fftai.sg

@FourierRehab

@FourierRehab

China Corporate Office

Fourier Intelligence Co. Ltd Floor 2, Building 12, No. 2388 Xiupu Road, Pudong District, Shanghai, China, 201203

Tel: +86 21 5030 8716

Singapore Corporate Office

Fourier Intelligence International Pte. Ltd. Marina One West Tower, 9 Straits View #05-07, Singapore 018937

Tel: +65 6911 6651

Malaysia Corporate Office

Fourier Intelligence Sdn. Bhd. Level 8-2, Menara Pernas, Tower 7, Avenue 7, Bangsar South City, 59200 Kuala Lumpur

Tel: +603 - 2242 0170



EXOPS™, which stands for Exoskeleton & Robotics Open Platform System, represents a pivotal advancement in the realm of exoskeletons and robotics, with technologies dating back several decades. Despite their longstanding presence, these innovations have faced challenges in widespread adoption, primarily due to the hurdles of efficient application and their prohibitively high costs. Moreover, researchers in laboratories grapple with the financial burden of constructing or acquiring exoskeletons that may not be open for research purposes. The key lies in fostering openness, a strategy that can unite resources for the greater good. By offering EXOPS™ as an open platform, we eliminate the need for researchers to embark on the arduous task of building exoskeletons from scratch, thereby expediting exploration and fostering meaningful application and cooperation.



Why use EXOPS™

To provide an open platform to educate, promote, and accelerate the development of exoskeleton and robotics systems for future meaningful real-life application and adoption. Anyone interested in understanding and contributing to the research and development of rehabilitation robotics technology, such as robotic laboratories, research institutions, or institutes of higher learning, and has a specific emphasis on secondary development to reduce the cost, time, and burden associated with constructing rehabilitation robots from the ground up, is recommended to use EXOPS™.

Applications













Research

Assistive Technology

Rehab Training

Augmentation Education

Industry



Fourier Rehab's wide range of robotics and technologies for EXOPS™ suitable for rehabilitation research

What does EXOPS™ provide?

EXOPS™ is the first of its kind to provide a software-centric platform with modular hardware while delivering multiple locomotion patterns to global creators. It includes hardware, API, SDK, and development support.

How can you benefit from EXOPS™?

Fourier Rehab believes that EXOPS™ is a platform that promotes creativity and innovation. Being open and available enables collaboration and the development of robotics technology, helping solve real-world problems.

EXOPS™ Framework

Applications (Walking Assistance, Rehab Training, Motor Enhancement)



Movement/Gait Velocity/Acceleration Assistive Force Trajectory SDK Motion Control: PID Control, Impedance Control, Adaptive Control

Software LabVIEW Visual Studio Unity **MATLAB** ROS Interface CAN bus **Ethernet** PCI/RS485 E.g. Open BCI, Magic Leap, IoT Fourier Exoskeleton and Robotics Controller Hardware **Actuation System** Force Sensing System **Motion Sensors**



Empowering You

Fourier Rehab is a technology-driven company, infusing creativity into the development of exoskeleton and rehabilitation robotics. 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.