

AMBIDEXTER PORTABLE REHABILITATION DEVICE FOR TRAINING FINE MOTOR SKILLS

TECHNOLOGY OVERVIEW

- Robotics and gamification.
- It uses a patented cam mechanism to offer a more natural and comfortable interaction with the subjects.
- It has embedded sensors that interact directly with the fingers which promote fine motor skills training. The data are recorded and presented graphically, these data are sent via IoT to the servers and can be retrieve by a mobile apps by the caregiver and the therapists.

POTENTIAL APPLICATIONS

- It help to train coordination of neurological, physiologic and biologic processes that is require for fine motor acquisition.
- Promote visual-motor coordination and motivation.
- Improve fine motor functional skills.

MARKET OPPORTUNITIES

- Rehabilitation : for children with development disorders such as Autism Spectrum Disorder (ASD), Global Development Delay (GDD) etc
- Tele-rehabilitation: for home rehabilitation through remote monitoring.
- Gamification: Improve motivation through interesting games.

COMMERCIALISATION

If you are keen to collaborate with RP on this project, please contact the Office of Technology Development

CONTACT DETAILS help-otd@rp.edu.sg

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Looking for an open innovation partner? Contact Republic Polytechnic today!

Whether you are looking for new ideas to improve your current business flow, need access to research and technology expertise, or require facilities to bring your innovative ideas to life, we may be the partner for you.

At Republic Polytechnic (RP), we bridge the gap between knowledge and application by facilitating information and technology transfer to industry partners. Taking a holistic approach, our team of experts can assess your business needs, provide consultancy, conduct feasibility studies, and render support to help increase your company's competitiveness.

Facilities and Equipment

RP is home to state-of-the-art facilities and the latest technology, which are on par with industry standards. You can access these facilities by collaborating with RP on joint projects or through facility and equipment rentals.

Research and Development

Transform your ideas into reality. RP's multidisciplinary applied R&D centres can work with you in many different ways, including exploiting new technologies, developing new products and streamlining processes.

Current Opportunities for Collaboration and Commercialisation

- Innovative Single-tube Multiplex Diagnostic Platform for Dengue and Chikungunya Viruses
- New Chemical Entities with Potential Applications in Photodynamic Therapy
- Wireless Proximity Sensing for Safety and Security Applications
- Cloud-based Logistics Tracking
- Multilingual Note Taking Software with Speaker Recognition
- Ambidexter: Portable Rehabilitation Device for Training Fine Motor Skills
- Plastic Heat Sink: Prevents heat related failures in integrated circuits and devices
- E-Scooter- Wheelchair Dockable

For more details, visit http://www.rp.edu.sg/Industry.aspx, or email us at help-otd@rp.edu.sg.