

## **ReVwalk Gamification**

FOR CEREBRAL PALSY KIDS

**INVENTOR FACULTY** 

**EMAIL CO-INVENTORS** 

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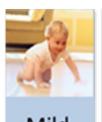
Mrs. Rabiatul Aisyah Binti Ariffin



Universiti Malaysia PAHANG

#### INTRODUCTION

There are 3 level of disablility of CF kids







Moderate Severe Mild

- Duration of standing and walking
- Walking distance by CP kids

#### **OBJECTIVE**

To integrate the rehabilitation walking gamification with toys via virtual interactive games

#### **NOVELTY**

- Convenient (easy to use and handle)
- ReVwalk Gamification Affordable training device of CP kids
- Compact portable design (Less 8 kg)
- Walk training device adapt real patient condition (High, holder and control)
- Suitable for all physiotherapist, trainer and rehab physician for CP kid to use
- Real 3D vitual walking exercise occupied with electronic game

# **ReVwalk Base** Virtual Reality Video (VR) Games

**PRODUCT REVOLUTION** 



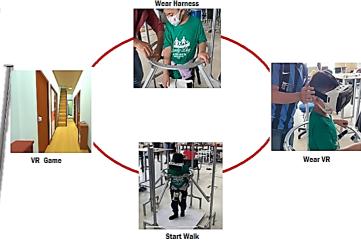
Version 1





Version 2

#### **FUNCTIONALITY**



#### **RESULT / FINDING**



For proof of concept, we managed to obtained at least 20 steps for normal kids to walk in 1



#### **ENVIRONMENTAL IMPACT**

- Growth the potential of Bio-Medical Engineering field in Malaysia especially in development of our own medical device.
- Introduce energy saving device that will minimum use of electricity.

#### **USEFULNESS**

- Help the CP kids to walk for 30 steps per minute.
- Visualize an entertaining game.

#### **PUBLICATION**

MAHM Adib, MZA Awang, RA Ariffin, Enhancing the rehabilitation virtual walk (ReVwalk) gamification with mobile applications for cerebral palsy kid training, International Conference on Bioengineering and Biomedical Engineering (ICBBE 2021)

[Scopus Indexed –Accepted]

#### **COMMERCIALIZATION**

1.	Who are the potential users / player?	Cerebral Palsy kids at the age range of 4-6 years old.
2.	Does similar games exist in the market?	No (Based on features and sensor)
4.	What is the industrial project that your technology/product is to solve?	<ul> <li>To improve cerebral palsy kids' movement.</li> <li>To promote different type of walker to Rehabilitation Healthcare.</li> </ul>
5.	Which community will benefit from your technology/product?	<ul><li>Rehabilitation Healthcare</li><li>Hospitals.</li></ul>

#### LOI / COLLABORATION









### For more detail please contact:



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