

MIIEx2017

Melaka
International
Intellectual
Exposition

PROGRAMME ABSTRACT

AUTISM

INNOVATION

DESIGN

INVENTION

“Bridging Gaps with Creativity for Future Sustainability”

MIIEX2017



"Bridging the Gaps with Creativity for Future Sustainability"

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COVER DESIGN:

AFTI Sdn Bhd

PUBLISHED BY:

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FIRE SAFETY AWARENESS VISUALIZATION VIA DIGITAL HOLOGRAPHY FOR AUTISTIC CHILDREN

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Abstract

Autism spectrum disorders (ASD) are characterized by challenges with social skills, repetitive behaviors and nonverbal communication caused by different combinations of genetic and environmental influences. Motor impairments in autistic people are known as "associated symptoms" which will affect their motor skills thus affecting their academic performance. Fire safety consists of what to do when there is a fire as well as how to prevent them from growing bigger. The main idea of this project is to teach autistic children on fire safety as there are a few cases where autistic children were killed in fire due to their lack of knowledge on fire safety. A research made proved that Leap Motion technology helped in improving autistic children's motor skill thus this method is chosen along with holographic technology that will attract the attention of these children. The development of this application emphasized on user-friendly graphical user interface added with 2D and 3D elements that will make it convenient for students to interact with the application. Methodology used is ADDIE model as this model provides flexibility and more systematic with ability to alter the phases instantly. This project is evaluated on usability of the product and from the data collected showed that most feedback are positive. For future work, the application will be better if it could be use not just by nonverbal autistic children but also by other categories of ASD.