

MIIEx2017

Melaka
International
Intellectual
Exposition

PROGRAMME ABSTRACT

AUTISM

INNOVATION

DESIGN

INVENTION

“Bridging Gaps with Creativity for Future Sustainability”

MIIEX2017

The logo for MIIEX2017 features the text 'MIIEX2017' in a bold, black, sans-serif font. The '2017' is significantly larger than the 'MIIEX' part. Above the 'I' in 'MIIEX' is a stylized torch. To the right of the '2017' is a graphic of three buildings, including a mosque with a dome and two other structures, connected by a thin line.

"Bridging the Gaps with Creativity for Future Sustainability"

EDITORS AND COMPILERS:

Prof. Madya Dr. Shafinar Binti Ismail
Mohd Halim Bin Mahphoth
Aemillyawaty Binti Abas
Fazlina Mohd Radzi
Aidah Alias
Ilinadia Jamil
Nor Yus Shahirah Hassan
Shafirah Shaari
Farihan Azahari

COVER DESIGN:

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Division of Research and Industry Linkages
Universiti Teknologi MARA MELAKA
KM26 Jalan Lendu,
78000 Alor Gajah Melaka
Tel +606-5582094/ +606-5582190 / +606-5582113
Web: www.miiex2017.com

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LEGO ROBOT TOYS EMOTICON

Norazlin Binti Mohamad, Aslinda Che Mood, Nor Nazihah Che Othaman, Nor Nazihah Che Othaman, & Cindy Anak Belayong

UNIVERSITY TECHNOLOGY OF MARA CAMPUS PUNCAK ALAM

Abstract

Autism Spectrum Disorder (ASD) consists of autistic disorder, Asperger syndrome and Pervasive Developmental Disorder. ASD is known as neurodevelopment disorder which causes the significant of social, communication and behavioural challenges. Children with ASD usually having problems in developing expression, language and motor skills either in fine motor skills or gross motor skills. A study by Libertus, Sheperd, Ross & Landa (2014) proposed that there is reducing in grasping and fine motor skills among six-months-old infants at increased of genetic risk for ASD. LeBarton & Iverson (2013) found that children with ASD have relationship between the fine motor activities and the expressive language. To overcome this problem, it is necessary to understand the common symptoms and design suitable strategies that can help the children in this domain which developing the fine motor skills and expressing emotion. Nowadays many devices and program applications are invented to make life easier. This innovation is an application that is designed specifically to provide the needs of children with ASD though it appeals to children with all ages. The primary function is to identify the emotion among the children with ASD. Secondary functions consist of sensory issues and fine motor skills where the children with ASD have their own favourite material to touch such as soft surface and fuzzy. It is an application provided with six interchangeable geometric-shaped heads emotions featuring with the music according to the emotion and a range of textures to shows the sensory issues. It is important to show the designing of Lego toys that meet the needs of ASD children without looking like a special needs toy. The Lego robot is a toy that encourages the children with ASD in progressing their expression emotion and also the fine motor skills. It is different with other Lego toys ~~which they didn't have music and the texture of the surface also different.~~