



INNOVATION MATCH MX 2016-2017

2do Foro Internacional de
Talento Mexicano



Title: Towards the improvement of Healthy Ageing with Humanoid Robots

Abstract (250 words maximum)

Purpose:

According to The World Health Organization (WHO) 125 million people worldwide were aged 80 years or older in 2015 and it is predicted that 350 million of older people will live in low- and middle-income countries by 2050. The WHO pointed out that some challenges in Healthy Ageing arena are the improvement of methodologies for measurement, monitoring and understanding of physical activity. Elderly care using Robots has been mainly developed and used in Japan. For instance, (a) Ri-Man robot can see, hear and assess a person's health; (b) Paro therapy bot helps people with dementia to decrease stress or feelings of loneliness; and (c) Palro robot can be used in dancing activities. Similarly, Humanoid Robots (HR) such as Pepper and NAO have been used to understand human emotions. Recently, NAO has been also used to perform arm rehabilitation therapy for children and to teach diabetic children about various aspects of their condition.

Methodology:

For this work, I am proposing the use of NAO to create methodologies for measurement, monitoring and understanding the physical activity of the elderly.

Results:

Additionally, I am planning to present preliminary outcomes of using NAO as an instructor for the elderly whom will wear sensors to analyse the quality of movement.

Conclusions:

Finally, I will pointed out to the Mexican community that HR such as NAO and sensors attached to the body will help us to measure, to analyse, to understand and to improve the physical activity of the elderly.

Industrial and/or commercial application:

Health Science

www.innovationmatchmx.com

Av. México 102 Col. Latinoamericana. CP: 25270 Saltillo Coahuila México
Tel: (844) 4156200 Email: contacto@innovationmatchmx.com