CBIAAT

CONTEXT BASED IMAGE ANALYZER FOR ALZHIMER'S THERAPHY

GOWRYSHANKARY KANTHASAMY

A dissertation Submitted in partial fulfilment of the requirement for BEng (Hons) Software Engineering degree

Department of Computing

Informatics Institute of Technology, Sri Lanka in collaboration with University of Westminster, UK

2021

Abstract

Alzheimer's is an irreversible progressive brain disorder which affects the Cognitive health of the older adults. Eventually it will destroy their memory, thinking abilities and destroy the ability to perform a simplest task. This is the common course of dementia. Unlikely, any drugs can successfully treat this. keeping patients mind active will reduce the risk of this disease and delay the cognitive decline. Traditional way of therapy is letting them to engage in some memory activities and recalling their memory by showing past photographs with the help of a caretaker. Sentiments are very important in human interaction, and in the recent days the research interest of image sentiment analysis is increased. Alzheimer patients are facing difficulties in identifying sentiments. The aim of this project is to develop an intelligent image analyser which helps Alzheimer patient to recall their memories through their life events with the image sentiment. Project contains an intelligent image analyser and a sentiment analysis game which can keep the patient's brain active.

Keywords: Alzheimer's disease, Image sentiment analysis, Deep learning, Convolutional Neural Network, Residual Neural Network.