Early Detection of Dementia by Observing Change in the Driving Pattern of a Person using Smart Phone Sensors and DTW Algorithm

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Abstract

The word dementia describes a set of symptoms that could contain recollection defeat and difficulties alongside thinking, problem-solving or language. Dementia is provoked after the mind is broken by illnesses, such as Alzheimer's illness or a sequence of strokes. There are hundreds of requests obtainable to aid those recognized alongside dementia. But there are no apps or multimedia that can intimate a person whether he is possessing dementia or not. In established methods, a scope of examinations and diagnostic procedures are given to recognize dementia. These examinations for dementia are generally examinations of mental skills, blood examinations and mind scans. In this paper a novel method for noticing dementia is counseled by discerning recurrent adjustments in the steering outline of a person employing smartphone sensors and DTW algorithm, counseling possessing medication in advance beforehand the condition can become inferior in case the person is discovered to have dementia.

References


Index Terms

Computer Science

Algorithms

Keywords

Dementia, Alzheimer’s, DTW (Dynamic Time warping), accelerometer, magnetometer, gyroscope, SMA (simple moving average).