

A

Project Report on

DISEASES DIAGNOSIS USING COMPUTATIONAL NADI PATTERNS

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requirements for the award of the degree of*

Bachelor of Technology in

Electronics & Telecommunication

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Abstract

Ayurveda, which literally means the ‘Science of Life,’ has bestowed the miraculous science upon us of diagnosing the imbalances within our body, without the use of any instruments except fingers. Perception of the patterns of nadis is an important method of diagnostics in Ayurveda. Various types of diseases can be detected in early stages by using this nadi pareeksha which is also called as Pulse diagnosis. This paper surveys on various diseases that can be detected by the pulse diagnosis or nadi pareeksha and provides the information about how nadi pareeksha can be useful for the generation of computational patterns for various diseases which is useful for the early detection of several diseases.

The populace in the world is increasing vastly, so peoples have to face different types of diseases. But this disease detection tests are very expensive and needs more time and painful. It is not easy for poor people to go through it. In Ancient Ayurveda, there is miraculous science technique for knowing the imbalance of the human body, which is known as Nadi pariksha. Nadi Pariksha is the technique of feeling the palpations of adjoining three points of the radial artery, a few millimeters below the starting point of the base of the thumb. This method of sensing the pressure pulses used for the diagnosis of the diseases. But this Nadi parikshan requires expertise who has long experience and skill of reading the pulses for any disease diagnosis. In this paper, the system is designed using piezoelectric sensors using DAQ card and Matlab. The feature extraction, power spectrum tool and ApEn are used for analysis of the signals for prediction of health.

Ayurveda, which exactly means ‘Science of Life’, Ayur means ‘life’ and Veda means ‘science’. The Ancient medical science, Ayurveda is elaborated in India thousands of years ago. According to this oldest spiritual technique, the relation in between the body, mind, and spirit defines the wellness and health. If the body, mind, and spirit is in polyphony with the universe, the health is best. If our body, mind, and spirit has dissonance with universe, the health is not good. The things like genetic, birth defect, age, injuries, emotions, seasonal changes, climate, are responsible for the imbalance among the body, mind, spirit and the universe.

Abbreviations

ir – ir sensors

USB DAQ - usb Data Acquisition

GUI - graphical user interface

LED – Light Emitting Diode

LDR – Light Dependent Resistor

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