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Parkinson Disease Detection from Spiral and Wave Drawings using Machine Learning Algorithm

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Abstract: *Research in biometrics has grown substantially in recent years with an increasing number of applications. One of the most important applications is healthcare. Identification of the appropriate biomarkers with respect to particular fitness problems and detection of the same is of paramount significance for the improvement of medical decision assistance systems. For the sufferers laid low with Parkinson's Disease (PD), it's been duly found that impairment in the handwriting is directly proportional to the severity of the sickness. Also, the velocity and pressure implemented to the pen while sketching or writing something also are much lower in sufferers affected by Parkinson's disorder. Therefore, successfully figuring out such biomarkers accurately and precisely at the onset of the disorder will result in a better medical diagnosis. Therefore, a system is designed for studying Spiral drawing patterns and wave drawing patterns in sufferers affected by Parkinson's disease. With the help of various Machine Learning Algorithms, we will be able to analyse the spiral pattern and wave pattern and check whether the person is suffering from Parkinson's Disease or not.*

Keywords: Parkinson's Disease, Patterns, Spiral and Wave, Machine Learning

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