SECURE MEDICAL DATA SHARING USING DISEASE DIAGNOSIS NETWORKS

A MINI PROJECT REPORT

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in partial fulfillment for the award of the degree

of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

SCHOOL OF ENGINEERING AND TECHNOLOGY

DHANALAKSHMI SRINIVASAN UNIERSITY

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BONAFIDE CERTIFICATE

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INTERNAL EXAMINER **EXTERNAL EXAMINER**

ABSTRACT

Security is the most critical issue amid transmission of medical images because it contains sensitive information of patients. Medical image security is an essential method for secure the sensitive data when computerized images and their relevant patient data are transmitted across public networks. Sensitive images carry extensive important information and different features compared to standard images. Medical images have much more sensitive and essential information than any other digital image. Each pixel in the image can be necessary for the diagnosis process, and any deformation can result in a faulty diagnosis. The most robust securing of these images affects an image to the extent that it can be ignored; this is different from insensitive imagery as the border of redundancy is very low. The embedding capacity in medical images is deficient. Existing researchers present different data security techniques as cryptography and data hiding to guarantee data verification. But these approaches take more time and less security in medical image application. So in this project, implement Fragmented based Elliptical curve cryptography with Convolutional neural network algorithm to provide secure disease diagnosis system for medical images. Experimental results shows that the proposed system implemented Lung CT scan images that are collected from Open medical data sources and with high level security

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LIST OFABBREVIATIONS

S.NO	ABBREVIATION	EXPANSION
1	CNN	Convolutional Neural Network
2	GC	Garbled Circuit
3	DP	Differential Privacy
4	HCC	Health Care Center
5	ECC	Elliptic Curve Cryptography
6	RDBMS	Relational Data Base Management System
7	ADL	Architecture Description Language
8	LSB	Least Significant Bit
9	SGD	Stochastic Gradient Descent
10	LSTM	Long Short Term Memory