

Document Verification : Analysis of Overlapping Images & QR/Barcode Code

A SYNOPSIS

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Synopsis

Title of Project:

Document Verification : Analysis of Overlapping Images & QR/Barcode Code

Domain:

Web Applications

Technology used : Blockchain, QR/Barcode Scanning, Huffman Coding, High-Spectrum Imaging.

Abstract:

In the evolving landscape of digital document verification, the analysis of overlapping images combined with QR/Barcode code scanning has emerged as a critical technique to ensure document integrity and authenticity. This study focuses on leveraging advanced technologies to enhance document verification processes within the domain of web applications. We propose an integrated approach utilizing Blockchain, QR/Barcode Scanning, Huffman Coding, and High-Spectrum Imaging to address the challenges associated with document verification.

Keywords: High-Spectrum Imaging, Huffman Coding, Spectral Analysis, Security.

Problem Statement:

1. At the time of college admission, it is possible for students to get admission using fake documents. like an edit name, data, or other important information.
2. At the time of scholarship, it is possible for students to upload fake documents. like an edit name, data, or other important information. At the time of uploading we can check the document and only then allow this document.
3. At the time of hiring employees, it is possible for students to upload fake documents. like an edit name, data, or other important information. At the time of uploading we can check the document and only then allow this document.

Objective:

- **Enhance Document Integrity:** Utilize Blockchain technology to create a decentralized and tamper-proof record of document data, ensuring its immutability and traceability.
- **Improve Verification Efficiency:** Implement QR/Barcode Scanning to facilitate rapid and accurate access to document information, streamlining the verification process.
- **Optimize Data Management:** Employ Huffman Coding to compress and efficiently manage document data, thereby reducing storage requirements and transmission overhead.
- **Advance Image Analysis:** Apply High-Spectrum Imaging techniques to analyze and verify overlapping images within documents, ensuring detailed and precise validation of document authenticity and integrity.

Scope:

- **Mobile Application Development:** The initial scope does not include the development of mobile applications; the focus is on creating a web-based solution.
- **Scalability:** Enhancing the system's capability to handle larger volumes of documents and higher transaction loads efficiently.

Outcome of Project:

- We can secure documents.
- We can find manually edited documents. like changing the sign, name, date of the document.
- We can make a new secure documents database.

System Requirements:

1. Hardware Requirement

- Processor - Intel(R)Core(TM)i5
- Speed - 2.50 GHz
- RAM - 4 GB
- Hard Disk - 500 GB

2. Software Requirement

- Operating System - Windows 7
- Programming Language - java
- Database - MySQL 5.1
- Tool - Netbean 8.2