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Secure Image: An Advanced Encryption-Based Image Privacy Application

Ms. Gauri Bobade¹, Mohd Saad Ansari², Anish Mantri³, Khan Fazlurrehman⁴, Rohan Kamble⁵
Project Guide, Department of Information Technology Department¹
UG Students, Department of Information Technology^{2,3,4,5}
Vidyalankar Polytechnic, Wadala (East), Mumbai, India

Abstract: With the rapid expansion of digital platforms, securing images from unauthorized access has become a critical challenge. Traditional cloud storage solutions are vulnerable to cyber threats, data breaches, and unauthorized access. Secure Image is an Android application designed to mitigate these risks using advanced encryption methodologies such as AES-256 and RC4, biometric authentication, password encryption and controlled sharing mechanisms. The application provides various encryption methods, ensuring that images remain private even if a device is compromised. This paper discusses the system's architecture, encryption techniques, security challenges, testing results, and future enhancements to improve image privacy.

Keywords: Image Encryption, AES-256, RC4, Biometric Security, Password encryption, Secure Sharing, Digital Privacy, Cybersecurity, Android Security.

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