



**PROJECT TITLE :** QR Code Crypt

**GROUP MEMBERS:** 1. Himanshu Upadhyay  
2. Aditya Waskar

**GUIDE NAME :** Mr. Saurabh Suman

Year	Author Name	Title of paper	Method/ Algorithm used	Advantage	Limitation
2019	Md. Salahuddin Ahamed, Hossen Asiful Mustafa	A Secure QR Code System for Sharing Personal Confidential Information	RSA digital signature algorithm (Verification)	In this paper, we propose a novel SQRC system which will allow sharing authentic personal confidential information by means of QR code verification using RSA digital signature algorithm and also allow authorizing the information by means of QR code validation using RSA public key cryptographic algorithm.	RSA uses larger key size which may lead the system slow and affect the user experience.
			RSA public key cryptography (Validation)		
2019	Tushar Shinde	Efficient Image Set Compression	Efficient clustering, Fast direction oriented motion estimation algorithm, and an image reordering scheme with minimum predictive costs for better compression	The thesis addresses the challenge of efficiently compressing large sets of near-duplicate images. It focuses on improving compression speed while maintaining effectiveness through clustering, motion estimation, and image reordering techniques. Promising preliminary results are presented, with plans to apply the approach to hyperspectral and medical image sets.	One limitation of this project is that the proposed approaches for efficient image set compression may still require significant computational resources, potentially limiting their applicability on resource-constrained devices or in real-time scenarios.
2021	Sattar B. Sadkhan	Elliptic Curve Cryptography-Status, Challenges and Future trends	Elliptic Curve Cryptography	Elliptic Curve Cryptography (ECC) in modern cryptography. ECC is vital in wireless, mobile networks, and credit card security due to its efficiency and strong security with smaller key sizes. It discusses ECC's applications, algorithms, performance comparisons, and its superiority in terms of security and resource efficiency.	Elliptic Curve Cryptography (ECC) limitations include implementation complexity, performance variability, key size sensitivity, historical patent issues, adoption challenges, potential quantum threats, and the absence of a standardized curve.
2022	Dede Sudirman, Teguh Nurhadi Suharsono, Rina Mardiaty	Security Implementation of Wifi Password Asset Sharing With One Way Hash Cryptography Method Sha256 And QR Code	SHA-256	To secure platform for sharing Wi-Fi passwords with three methods: SHA-256 HASH function, Digital Signature, and QR CODEs. It ensures confidentiality and access control, providing owners with secure access while preventing disassembly. This innovation enhances Wi-Fi password sharing and security.	Limitations of this paper include the need for a central database to validate keycodes, potential security risks if the database is compromised, and reliance on the availability of the original data for validation. Additionally, the paper lacks discussion on potential real-world implementation challenges and scalability issues.
			Digital Signature		
2022	Venkateswara Sarma Bhamidipati, Raghavendra Sai	A Novel Approach to Ensure Security and Privacy While Using QR Code Scanning in Business Applications	-	The advantages of using secure QR codes include enhanced protection against tampering and malicious QR code applications, reduced risk of data breaches, increased privacy for users, and the ability to confidently integrate QR code-based processes into business operations.	Limitations of secure QR codes include potential tampering, reliance on user vigilance, susceptibility to malicious QR code applications, and the need for robust security measures in QR code handling.

Project Guide  
Mr. Saurabh Suman

Project Coordinator  
Mrs. Rupali Pashte