WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Text to Image Encryption

Mr. A. S. Salavi Kumbhar[1], Ms. Pranali Bedkyale[2], Ms. Pranali Kore[3], Ms. Piyusha Kore[4]

[1]Lecturer at DKTE, DKTE's Yeshwantrao Chavan Polytechnic Ichalkaranji, Ichalkaranji-416115, India
[2,3,4]Students at DKTE, DKTE's Yeshwantrao Chavan Polytechnic Ichalkaranji, Ichalkaranji-416115, India

A B S T R A C T

With the increasing dependence on digital communication, securing sensitive information has become paramount. This project proposes a novel approach to text-to-image encryption, aiming to address the limitations of existing methods and provide a secure and efficient solution. The proposed method first describe text transformation. Subsequently, describe encryption algorithm and any unique features. This approach offers several advantages, including encrypted data. This approach offers several advantages, including maintain the data is hidden. The system's performance was evaluated through using cryptography, achieving the secure chat encryption. Our findings demonstrate the effectiveness of the proposed method for secure text-to-image encryption, offering potential applications in YCP secure chat.

Keywords: Encryption, Decryption

1. Introduction

Text-to-image encryption is a critical component of secure communication in various industries, particularly in sectors like finance, healthcare, and government. This encryption method involves converting textual information into images for added security, making it challenging for unauthorized individuals to access sensitive data. The need for text-to-image encryption arises from the growing concerns related to data breaches and cyberattacks. As organizations and individuals increasingly rely on digital communication, the protection of information in transit is of paramount importance Here are some key industry backgrounds and user-based problems associated with text-to-image encryption:

1. Finance Industry: Financial institutions handle sensitive client information, and secure communication is crucial for maintaining trust. Text-to-image encryption helps protect financial data during transactions and communications, preventing unauthorized access or interception by malicious actors.

2. Healthcare Industry: In the healthcare sector, patient records and medical information are highly confidential. Text-to-image encryption ensures the privacy and security of patient data.

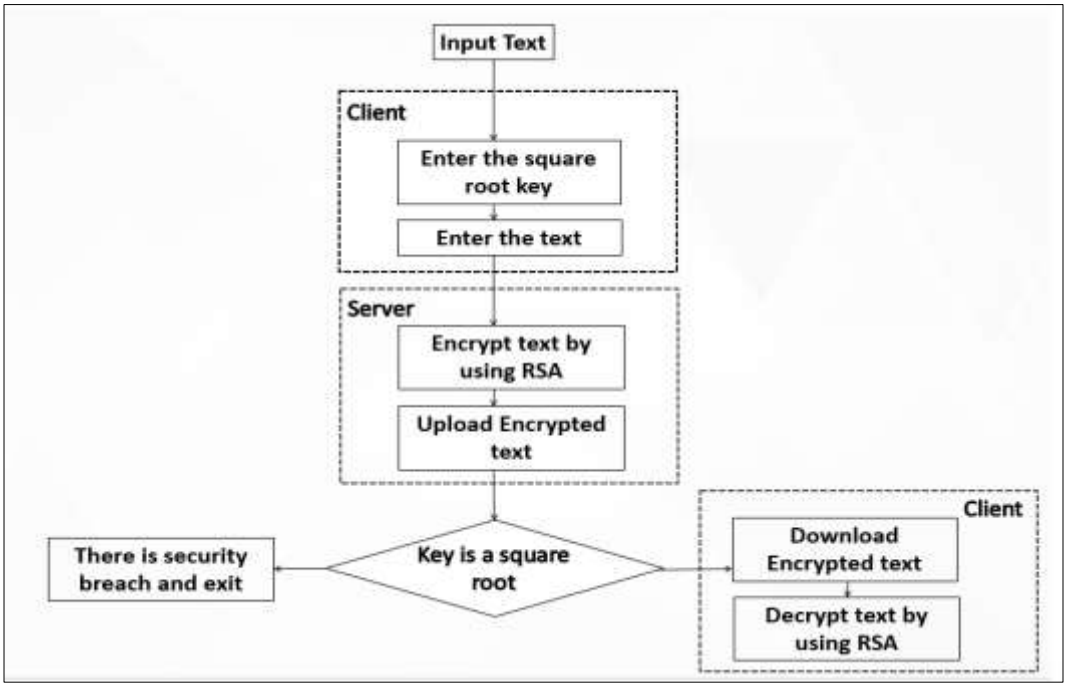
3. General User Problems: Users across all industries face common challenges, such as ease of use, compatibility, and key management. Ensuring that text-to-image encryption methods are user-friendly and integrate seamlessly into existing workflows is essential

4. Adoption and Education: Many users may not be aware of the benefits and best practices of text-to-image encryption. Encouraging adoption and providing education on its advantages and proper implementation is essential.

5.Interoperability: Ensuring that text-to-image encryption solutions are compatible with various devices, platforms, and communication channels is a challenge. Users often need encryption methods that work across diverse technologies.

6. Scalability: As data volumes grow, scalability becomes a concern. Organizations need text-to-image encryption solutions that can handle increasing quantities of information without compromising security

1.1 Planning



1.2 Used Technology

Cryptography is the study of encrypting and decrypting data to prevent unauthorized access. Cryptography allows for the **secure transmission** of digital data between willing parties. It is used to safeguard company secrets, secure classified information, and sensitive information from fraudulent activity, among other things. Crypto means hidden and graph means writing.

1.Symmetric Key Cryptography (Secret key)

2.Asymmetric Key Cryptography(public key)

RSA algorithm is an asymmetric cryptography algorithm. Asymmetric actually means that it works on two different keys i.e. **Public Key** and **Private Key.** As the name describes that the Public Key is given to everyone and the Private key is kept private.

1.3 Literature survey

A literature survey for problem identification and specification of text to image encryption would involve researching existing work and studies related to this topic. Here's a general approach to conducting such a survey:

1. Identify Relevant Keywords

2. Search Academic Databases

3. Review Relevant Papers

4. Categorize Research –

Text-to-Image Encryption Techniques

- Security and Cryptographic Aspects.

- Applications

- Challenges and Limitations

- Recent Developments

5. Compare and Analyze

6. Identify Gaps and Research Directions

7. Problem Specification

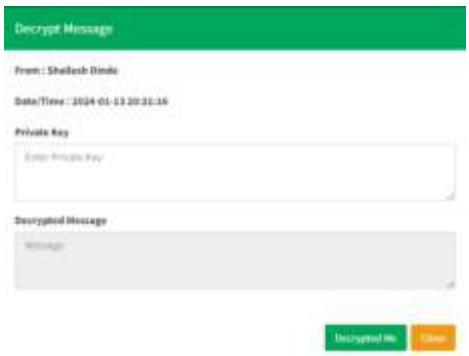
8. Formulate Objectives

9. Create a Research Plan

10. Cite and Reference

2. Illustrations

1.How to decrypt a message.



2.All encrypt chat information.

Fig. 1 - (a) Decrypt Message; (b) secure chatting data.

3. Advantages

Text-to-image encryption is a technique that converts textual information into images while maintaining its confidentiality. Here are some advantages of text-to-image encryption: .

1.Security

2. Visual Representation

3. Anonymity

4. Dual Authentication

5. Content Hiding

6. Resistance to Text Analysis

7. Complementing Text Encryption

8. Diverse Applications

4. Limitation

Besides the above achievements and the successful completion of the project, we still feel the project has some limitations, listed as below:

1. It is not a large-scale system.

2. Only limited information provided by this system.

3. Since it is an online project, customers need internet connection to buy products.

Acknowledgements

I would like to convey my heartfelt gratitude to Mr. A.P.Salvi Kumbhar for her tremendous support and assistance in the completion of my project. I would also like to thank our Principal, Mr.A.P.Kothali, for providing me with this wonderful opportunity to work on a project with the topic Text to image encryption. The completion of the project would not have been possible without their help and insights...

References

•https://www.researchgate.net/publication/361836527_A_proposed_model_for_text_and_image_encryption_using_different_techniques

• https://github.com/topics/image-encryption

• https://www.jetir.org/papers/JETIR2107799.pdf

• https://aihubprojects.com/image-encryption-decryption-ai-projects