姓名: 许舒颖

學位: 博士班

年級: 五年級

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通過校外口試		
論文名稱		

### 著作目錄

### International Journal Papers

- 1. Shuying Xu, Chin-Chen Chang\*, and Yanjun Liu,(2020): "A Novel Image Compression Technology Based on Vector Quantisation and Linear Regression Prediction". Connection Science, vol. 33, no. 2, Jul. 2021, pp. 219-236.
- 2. Ji-Hwei Horng, Shuying Xu\*, and Chin-Chen Chang, (2019): "An Efficient Data Hiding Scheme Based on Multidimensional Mini-SuDoKu". Sensors, vol. 20, no. 9, May. 2020, pp. 2739.
- 3. Shuying Xu, Chin-Chen Chang\*, and Yanjun Liu, (2021): "A High-Capacity Reversible Data Hiding Scheme for Encrypted Images Employing Vector Quantization Prediction". Multimedia Tools and Applications, vol. 80, no. 13, Mar. 2021, pp. 20307-20325.
- 4. Shuying Xu, Ji-Hwei Horng\*, and Chin-Chen Chang\*, (2021): "Reversible Data Hiding Scheme Based on VQ Prediction and Adaptive Parametric Binary Tree Labeling for Encrypted Images". IEEE Access, vol. 9, no. 1, Apr. 2021, pp. 55191-55204.
- 5. Shuying Xu, Chin-Chen Chang, and Ji-Hwei Horng\*, (2022): "A Steganography Based on Optimal Multi-Threshold Block Labeling". Computer Systems Science and Engineering, vol. 44, no. 1, Jun. 2023, pp. 721-739.
- 6. Shuying Xu, Ji-Hwei Horng\*, Ching-Chun Chang and Chin-Chen Chang, (2022): "Reversible Data Hiding with Hierarchical Block Variable Length Coding for Cloud Security". IEEE Transactions on Dependable and Secure Computing, vol. 20, no. 5, 01 Sept.-Oct. 2023, pp. 4199-4213.
- 7. Shuying Xu, Chin-Chen Chang, and Ji-Hwei Horng\*, (2023): "Image Covert Communication with Block Regulation". IEEE Signal Processing Letter, 2023.
- 8. Jui-Chuan Liu, Ching-Chun Chang, Chin-Chen Chang\*, and Shuying Xu, (2023): "High-Capacity Imperceptible Data Hiding Using Permutation-Based Embedding Process for IoT Security". Electronics, 2023.
- 9. Chin-Chen Chang\*, Shuying Xu, Jui-Chuan Liu, and Ching-Chun Chang, (2024): "A Crypto-attacking Scheme for a (t, n)-threshold Image Encryption Method". Journal of Internet Technology, 2024.

- 10. Shuying Xu, Chin-Chen Chang\*, and Ji-Hwei Horng\*, (2023): "Data Hiding with Thumbnail-Preserving Encryption for Cloud Medical Images". Multimedia Tools and Applications, 2024.
- 11. Shuying Xu, Jui-Chuan Liu, Ching-Chun Chang, and Chin-Chen Chang\*,(2024): "Covert Communication for Dual Images with Two-Tier Bits Flipping". Mathematics, 2024.
- 12. Shuying Xu, Ching-Chun Chang\*, Huy H. Nguyenb, and Isao Echizenb, (2024):
  "Reversible Anonymisation for Privacy of Facial Biometrics via Cyclic
  Learning". EURASIP Journal on Information Security · 2024.
- 13. Ching-Chun Chang, Shuying Xu, Kai Gao, and Chin-Chen Chang\*,(2024): "Cryptanalysis of Dual-Stage Permutation Encryption Using Large-Kernel Convolutional Neural Network and Known Plaintext Attack."Cryptography, 2024.
- 14. Shuying Xu, Ji-Hwei Horng\*, Ching-Chun Chang and Chin-Chen Chang\*, (2024): "Reversible Data Hiding in Encrypted JPEG Images with Polynomial Secret Sharing for IoT Security". IEEE Internet of Things Journal, 2024.

### International Conference Papers

## Revised Papers

1. Shuying Xu, Ji-Hwei Horng\*, and Chin-Chen Chang\*,(2023): "Cryptospace Image Steganography for Cloud Security via Cycle-Consistent GAN". submitted to Signal Processing: Image Communication (2024/07/05)

# Submitted Papers

- 1. Ching-Chun Chang, Kai Gao, Shuying Xu, Anastasia Kordoni, Christopher Leckie, and Isao Echizen, (2025): "Psychometrics for Hypnopaedia-Aware Machinery via Chaotic Projection of Artificial Mental Imagery." submitted to IEEE Access (2025/1/15)
- 2. Shuying Xu, Ji-Hwei Horng\*, Ching-Chun Chang and Chin-Chen Chang\*, (2024): "Reversible Steganography in Cipher Domain for JPEG Images using Polynomial Homomorphism". submitted to IEEE Transactions on Circuits and Systems for Video Technology (2024/12/22)
- 3. Shuying Xu, Ji-Hwei Horng\*, Ching-Chun Chang, and Chin-Chen Chang\*,(2025): "Reversible Embedding Message in Encrypted 3D Mesh Models Using Ripple Prediction for Cloud Security". submitted to IEEE Internet of Things Journal. (2025/1/30)

#### **Patents**

Shuying Xu, Ching-Chun Chang, Yanjun Liu,(2020): "Image compression method with vector quantization compression and linear regression prediction". China Patent, ZL 2020 1 0517753.5. (authorized in Jun. 2023)

- Shuying Xu, Chin-Chen Chang, Yanjun Liu, and Ji-Wei Horng, (2020): "Information hiding algorithm method for 3-dimensional reference matrix based on minisudoku matrix". China Patent, ZL 2020 1 0517768.1. (authorized in Feb. 2022)
- 3 Shuying Xu, Ji-Wei Horng, Chin-Chen Chang\*, and Jun Yu,(2021): "A reversible information hiding method for encrypted images with adaptive parametric binary tree labeling". China Patent, ZL 2021 1 0368362.6. (authorized in Mar. 2023)
- Shuying Xu, Ji-Wei Horng, Chin-Chen Chang\*, and Jun Yu,(2021): "Hierarchical block variable length coding for cloud security". China Patent, ZL 2021 1 0649080.3. (authorized in Jun. 2023)
- 5 Shuying Xu, Ching-Chun Chang, and Chin-Chen Chang\*, (2021): "A reversible information hiding method for encrypted images with elastic selection and runlength encoding". China Patent, ZL 2021 1 0647259.5. (authorized in Jun. 2023)
- 6 Shuying Xu, Ching-Chun Chang, and Chin-Chen Chang\*,(2022): "Face anonymization method based on cyclic learning". China Patent, ZL 2022 1 0605831.6 (authorized in Oct. 2023)
- 7 Shuying Xu, Ching-Chun Chang, and Chin-Chen Chang\*,(2022): "Encrypted Space Steganography for Medical Image Preservation".
- 8 Shuying Xu, Ching-Chun Chang, Ji-Wei Horng and Chin-Chen Chang\*,(2022): "A Cryptographic Spatial Steganography System Based on Cycle Generative Adversarial Networks".
- 9 Shuying Xu, Ching-Chun Chang, Ji-Wei Horng and Chin-Chen Chang\*,(2024): "Crypto-space Steganography for 3D Mesh Models with Ripple Prediction".
- Shuying Xu, Kai Gao, Ching-Chun Chang, and Chin-Chen Chang\*,(2025): "Thumbnail-Preserving Encryption for JPEG Images Using Polynomial Secret Sharing in Galois Fields".
- Shuying Xu, Kai Gao, Ching-Chun Chang, and Chin-Chen Chang\*,(2025): "High-Robustness Image Watermarking Algorithm Based on Key Region Attention Mechanism".

### Pending

1. **Shuying Xu** and Ching-Chun Chang,(2023): "Reversible anonymisation of facial biometrics".

## Book Chapters