#### 吳志成老師

#### 簡歷

曾任職王安電腦楊梅廠硬體工程師 3 年,花蓮慈濟醫學中心程式設計師、醫療資訊發展組組長、資訊室專員 31 年。最大的希望是每一位畢業的同學都可以找到自己喜歡的工作、樂在其中、回饋社會,同學的成就,就是老師最大的喜悅。



#### 學歷

國立東華大學 資訊工程學系博士

#### 研究方向

密碼學及資訊安全 (Cryptography and Information Security)

秘密影像分享 (Secret Image Sharing)

視覺密碼 (Visual Cryptography)

區塊鏈技術 (Blockchain Technology)

#### 專長

醫院資訊系統 (Hospital Information System)

電子病歷 (Electronic Medical Record)

資料庫設計及管理(Database Design and Management)

資訊系統開發與管理(Project Development & Management)

資訊安全 (Information Security)

### 獲獎/服務

- ◎ 「中華民國資訊學會」103 年度最佳博士論文-佳作
- ⊚ iiWAS 2009 **Best Paper** Award in the 11th International Conference on Information Integration and Web-based Applications & Services (iiWAS2009). The title of paper is "Micropayment Schemes with Ability to Return Changes"
- ◎ 93 年行政院衛生署「醫療憑證管理中心」應用推廣說明會主講人,演講題目:醫療資訊系統導入電子簽章之參考架構與整體解決方案

# 發表 (研究成果) 列表

## **Publication Lists**

[Journal]

| <ol> <li>C.N. Yang, C.C. Wu, and Y.C. Lin "k out of n Region-Based Progressive Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 29, pp. 252-262, Jan., 2019. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Constructions and Properties of General (k, n) Block-Based Progressive Visual Cryptography," ETRI Journal, Vol. 37, No. 5, pp. 979-989, Oct., 2015. [SCI 5-year IF: 0.762].</li> <li>C.N. Yang, C.C. Wu, and D. Wang, "A Discussion on the Relationship between Probabilistic Visual Cryptography and Random Grid," Information Sciences, Vol. 278, pp. 141-173, Sep., 2014. [SCI 5-year IF: 5.305].</li> <li>S. Cimato, C.N. Yang, and C.C. Wu, "Visual Cryptography Based Watermarking," LNCS Transactions on Data Hiding and Multimedia Security, Vol. IX, pp. 91-109, 2014.</li> <li>P. Li, C.N. Yang, C.C. Wu, Q. Kong, and Y. Ma, "Essential Secret Image Sharing Scheme with Different Importance of Shadows," Journal of Visual Communication and Image Representation, Vol. 24, Issue 7, pp. 1106-1114, Oct., 2013. [SCI 5-year IF: 2.591].</li> <li>C.N. Yang, and C.C. Wu, "MSRC: (M)icropayment (S)cheme with Ability to (R)eturn (C)hanges," Mathematical and Computer Modelling, Vol. 58, pp. 96-107, July, 2013. [2015 SCI 5-year IF: 1.602].</li> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].</li> <li>C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science</li> </ol> | [Jour] | T T   |
|--|--------|---|
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| <ol> <li>Video Technology, Vol. 29, pp. 252-262, Jan., 2019. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Constructions and Properties of General (k, n) Block-Based Progressive Visual Cryptography," ETRI Journal, Vol. 37, No. 5, pp. 979-989, Oct., 2015. [SCI 5-year IF: 0.762].</li> <li>C.N. Yang, C.C. Wu, and D. Wang, "A Discussion on the Relationship between Probabilistic Visual Cryptography and Random Grid," Information Sciences, Vol. 278, pp. 141-173, Sep., 2014. [SCI 5-year IF: 5.305].</li> <li>S. Cimato, C.N. Yang, and C.C. Wu, "Visual Cryptography Based Watermarking," LNCS Transactions on Data Hiding and Multimedia Security, Vol. IX, pp. 91-109, 2014.</li> <li>P. Li, C.N. Yang, C.C. Wu, Q. Kong, and Y. Ma, "Essential Secret Image Sharing Scheme with Different Importance of Shadows," Journal of Visual Communication and Image Representation, Vol. 24, Issue 7, pp. 1106–1114, Oct., 2013. [SCI 5-year IF: 2.591].</li> <li>C.N. Yang, and C.C. Wu, "MSRC: (M)icropayment (S)cheme with Ability to (R)eturn (C)hanges," Mathematical and Computer Modelling, Vol. 58, pp. 96-107, July, 2013. [2015 SCI 5-year IF: 1.602].</li> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].</li> <li>C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science</li> </ol>   | 1.     |   |
| <ol> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Constructions and Properties of General (k, n) Block-Based Progressive Visual Cryptography," ETRI Journal, Vol. 37, No. 5, pp. 979-989, Oct., 2015. [SCI 5-year IF: 0.762].</li> <li>C.N. Yang, C.C. Wu, and D. Wang, "A Discussion on the Relationship between Probabilistic Visual Cryptography and Random Grid," Information Sciences, Vol. 278, pp. 141-173, Sep., 2014. [SCI 5-year IF: 5.305].</li> <li>S. Cimato, C.N. Yang, and C.C. Wu, "Visual Cryptography Based Watermarking," LNCS Transactions on Data Hiding and Multimedia Security, Vol. IX, pp. 91-109, 2014.</li> <li>P. Li, C.N. Yang, C.C. Wu, Q. Kong, and Y. Ma, "Essential Secret Image Sharing Scheme with Different Importance of Shadows," Journal of Visual Communication and Image Representation, Vol. 24, Issue 7, pp. 1106–1114, Oct., 2013. [SCI 5-year IF: 2.591].</li> <li>C.N. Yang, and C.C. Wu, "MSRC: (M)icropayment (S)cheme with Ability to (R)eturn (C)hanges," Mathematical and Computer Modelling, Vol. 58, pp. 96-107, July, 2013. [2015 SCI 5-year IF: 1.602].</li> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].</li> <li>C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science</li> </ol>  |        |   |
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| of General (k, n) Block-Based Progressive Visual Cryptography," ETRI Journal, Vol. 37, No. 5, pp. 979-989, Oct., 2015. [SCI 5-year IF: 0.762].  3. C.N. Yang, C.C. Wu, and D. Wang, "A Discussion on the Relationship between Probabilistic Visual Cryptography and Random Grid," Information Sciences, Vol. 278, pp. 141-173, Sep., 2014. [SCI 5-year IF: 5.305].  4. S. Cimato, C.N. Yang, and C.C. Wu, "Visual Cryptography Based Watermarking," LNCS Transactions on Data Hiding and Multimedia Security, Vol. IX, pp. 91-109, 2014.  5. P. Li, C.N. Yang, C.C. Wu, Q. Kong, and Y. Ma, "Essential Secret Image Sharing Scheme with Different Importance of Shadows," Journal of Visual Communication and Image Representation, Vol. 24, Issue 7, pp. 1106–1114, Oct., 2013. [SCI 5-year IF: 2.591].  6. C.N. Yang, and C.C. Wu, "MSRC: (M)icropayment (S)cheme with Ability to (R)eturn (C)hanges," Mathematical and Computer Modelling, Vol. 58, pp. 96-107, July, 2013. [2015 SCI 5-year IF: 1.602].  7. C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].  8. C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].  9. C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science   |        | 4.682].   |
| <ol> <li>Journal, Vol. 37, No. 5, pp. 979-989, Oct., 2015. [SCI 5-year IF: 0.762].</li> <li>C.N. Yang, C.C. Wu, and D. Wang, "A Discussion on the Relationship between Probabilistic Visual Cryptography and Random Grid," Information Sciences, Vol. 278, pp. 141-173, Sep., 2014. [SCI 5-year IF: 5.305].</li> <li>S. Cimato, C.N. Yang, and C.C. Wu, "Visual Cryptography Based Watermarking," LNCS Transactions on Data Hiding and Multimedia Security, Vol. IX, pp. 91-109, 2014.</li> <li>P. Li, C.N. Yang, C.C. Wu, Q. Kong, and Y. Ma, "Essential Secret Image Sharing Scheme with Different Importance of Shadows," Journal of Visual Communication and Image Representation, Vol. 24, Issue 7, pp. 1106–1114, Oct., 2013. [SCI 5-year IF: 2.591].</li> <li>C.N. Yang, and C.C. Wu, "MSRC: (M)icropayment (S)cheme with Ability to (R)eturn (C)hanges," Mathematical and Computer Modelling, Vol. 58, pp. 96-107, July, 2013. [2015 SCI 5-year IF: 1.602].</li> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].</li> <li>C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science</li> </ol>   | 2.     | C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Constructions and Properties   |
| <ol> <li>C.N. Yang, C.C. Wu, and D. Wang, "A Discussion on the Relationship between Probabilistic Visual Cryptography and Random Grid," Information Sciences, Vol. 278, pp. 141-173, Sep., 2014. [SCI 5-year IF: 5.305].</li> <li>S. Cimato, C.N. Yang, and C.C. Wu, "Visual Cryptography Based Watermarking," LNCS Transactions on Data Hiding and Multimedia Security, Vol. IX, pp. 91-109, 2014.</li> <li>P. Li, C.N. Yang, C.C. Wu, Q. Kong, and Y. Ma, "Essential Secret Image Sharing Scheme with Different Importance of Shadows," Journal of Visual Communication and Image Representation, Vol. 24, Issue 7, pp. 1106–1114, Oct., 2013. [SCI 5-year IF: 2.591].</li> <li>C.N. Yang, and C.C. Wu, "MSRC: (M)icropayment (S)cheme with Ability to (R)eturn (C)hanges," Mathematical and Computer Modelling, Vol. 58, pp. 96-107, July, 2013. [2015 SCI 5-year IF: 1.602].</li> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].</li> <li>C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science</li> </ol>  |        | of General (k, n) Block-Based Progressive Visual Cryptography," ETRI      |
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| <ol> <li>Sciences, Vol. 278, pp. 141-173, Sep., 2014. [SCI 5-year IF: 5.305].</li> <li>S. Cimato, C.N. Yang, and C.C. Wu, "Visual Cryptography Based Watermarking," LNCS Transactions on Data Hiding and Multimedia Security, Vol. IX, pp. 91-109, 2014.</li> <li>P. Li, C.N. Yang, C.C. Wu, Q. Kong, and Y. Ma, "Essential Secret Image Sharing Scheme with Different Importance of Shadows," Journal of Visual Communication and Image Representation, Vol. 24, Issue 7, pp. 1106–1114, Oct., 2013. [SCI 5-year IF: 2.591].</li> <li>C.N. Yang, and C.C. Wu, "MSRC: (M)icropayment (S)cheme with Ability to (R)eturn (C)hanges," Mathematical and Computer Modelling, Vol. 58, pp. 96-107, July, 2013. [2015 SCI 5-year IF: 1.602].</li> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].</li> <li>C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science</li> </ol>   | 3.     | C.N. Yang, C.C. Wu, and D. Wang, "A Discussion on the Relationship        |
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| <ul> <li>Watermarking," LNCS Transactions on Data Hiding and Multimedia Security, Vol. IX, pp. 91-109, 2014.</li> <li>P. Li, C.N. Yang, C.C. Wu, Q. Kong, and Y. Ma, "Essential Secret Image Sharing Scheme with Different Importance of Shadows," Journal of Visual Communication and Image Representation, Vol. 24, Issue 7, pp. 1106–1114, Oct., 2013. [SCI 5-year IF: 2.591].</li> <li>C.N. Yang, and C.C. Wu, "MSRC: (M)icropayment (S)cheme with Ability to (R)eturn (C)hanges," Mathematical and Computer Modelling, Vol. 58, pp. 96-107, July, 2013. [2015 SCI 5-year IF: 1.602].</li> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].</li> <li>C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science</li> </ul>   |        | Sciences, Vol. 278, pp. 141-173, Sep., 2014. [SCI 5-year IF: 5.305].      |
| <ol> <li>Security, Vol. IX, pp. 91-109, 2014.</li> <li>P. Li, C.N. Yang, C.C. Wu, Q. Kong, and Y. Ma, "Essential Secret Image Sharing Scheme with Different Importance of Shadows," Journal of Visual Communication and Image Representation, Vol. 24, Issue 7, pp. 1106–1114, Oct., 2013. [SCI 5-year IF: 2.591].</li> <li>C.N. Yang, and C.C. Wu, "MSRC: (M)icropayment (S)cheme with Ability to (R)eturn (C)hanges," Mathematical and Computer Modelling, Vol. 58, pp. 96-107, July, 2013. [2015 SCI 5-year IF: 1.602].</li> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].</li> <li>C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science</li> </ol>  | 4.     | S. Cimato, C.N. Yang, and C.C. Wu, "Visual Cryptography Based             |
| <ol> <li>P. Li, C.N. Yang, C.C. Wu, Q. Kong, and Y. Ma, "Essential Secret Image Sharing Scheme with Different Importance of Shadows," Journal of Visual Communication and Image Representation, Vol. 24, Issue 7, pp. 1106–1114, Oct., 2013. [SCI 5-year IF: 2.591].</li> <li>C.N. Yang, and C.C. Wu, "MSRC: (M)icropayment (S)cheme with Ability to (R)eturn (C)hanges," Mathematical and Computer Modelling, Vol. 58, pp. 96-107, July, 2013. [2015 SCI 5-year IF: 1.602].</li> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].</li> <li>C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science</li> </ol>  |        | Watermarking," LNCS Transactions on Data Hiding and Multimedia            |
| Sharing Scheme with Different Importance of Shadows," Journal of Visual Communication and Image Representation, Vol. 24, Issue 7, pp. 1106–1114, Oct., 2013. [SCI 5-year IF: 2.591].  6. C.N. Yang, and C.C. Wu, "MSRC: (M)icropayment (S)cheme with Ability to (R)eturn (C)hanges," Mathematical and Computer Modelling, Vol. 58, pp. 96-107, July, 2013. [2015 SCI 5-year IF: 1.602].  7. C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].  8. C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].  9. C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science   |        | Security, Vol. IX, pp. 91-109, 2014.                                      |
| <ol> <li>Communication and Image Representation, Vol. 24, Issue 7, pp. 1106–1114, Oct., 2013. [SCI 5-year IF: 2.591].</li> <li>C.N. Yang, and C.C. Wu, "MSRC: (M)icropayment (S)cheme with Ability to (R)eturn (C)hanges," Mathematical and Computer Modelling, Vol. 58, pp. 96-107, July, 2013. [2015 SCI 5-year IF: 1.602].</li> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].</li> <li>C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science</li> </ol>   | 5.     | P. Li, C.N. Yang, C.C. Wu, Q. Kong, and Y. Ma, "Essential Secret Image    |
| <ol> <li>Oct., 2013. [SCI 5-year IF: 2.591].</li> <li>C.N. Yang, and C.C. Wu, "MSRC: (M)icropayment (S)cheme with Ability to (R)eturn (C)hanges," Mathematical and Computer Modelling, Vol. 58, pp. 96-107, July, 2013. [2015 SCI 5-year IF: 1.602].</li> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].</li> <li>C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science</li> </ol>  |        | Sharing Scheme with Different Importance of Shadows," Journal of Visual   |
| <ol> <li>C.N. Yang, and C.C. Wu, "MSRC: (M)icropayment (S)cheme with Ability to (R)eturn (C)hanges," Mathematical and Computer Modelling, Vol. 58, pp. 96-107, July, 2013. [2015 SCI 5-year IF: 1.602].</li> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].</li> <li>C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science</li> </ol>   |        | Communication and Image Representation, Vol. 24, Issue 7, pp. 1106–1114,  |
| <ol> <li>to (R)eturn (C)hanges," Mathematical and Computer Modelling, Vol. 58, pp. 96-107, July, 2013. [2015 SCI 5-year IF: 1.602].</li> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].</li> <li>C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science</li> </ol>   |        | Oct., 2013. [SCI 5-year IF: 2.591].                                       |
| <ol> <li>pp. 96-107, July, 2013. [2015 SCI 5-year IF: 1.602].</li> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].</li> <li>C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science</li> </ol>   | 6.     | C.N. Yang, and C.C. Wu, "MSRC: (M)icropayment (S)cheme with Ability       |
| <ol> <li>C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].</li> <li>C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science</li> </ol>   |        | to (R)eturn (C)hanges," Mathematical and Computer Modelling, Vol. 58,     |
| Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19, Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].  8. C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].  9. C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science  |        | pp. 96-107, July, 2013. [2015 SCI 5-year IF: 1.602].                      |
| <ol> <li>Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].</li> <li>C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4.682].</li> <li>C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science</li> </ol>   | 7.     | C.N. Yang, C.C. Wu, Y.C. Lin, and C. Kim, "Enhanced Matrix-Based          |
| <ol> <li>C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4. 682].</li> <li>C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science</li> </ol>  |        | Secret Image Sharing Scheme," IEEE Signal Processing Letters, Vol. 19,    |
| Incrementing Scheme in Visual Cryptography," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4. 682].  9. C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science  |        | Issue 12, pp. 789-792, Dec., 2012. [SCI 5-year IF: 3.506].                |
| Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810, May, 2012. [SCI 5-year IF: 4. 682].  9. C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science  | 8.     | C.N. Yang, H.W. Shih, C.C. Wu, and L. Harn, "k out of n Region            |
| May, 2012. [SCI 5-year IF: 4. 682].  9. C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science  |        | Incrementing Scheme in Visual Cryptography," IEEE Transactions on         |
| May, 2012. [SCI 5-year IF: 4. 682].  9. C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n) Probabilistic Visual Cryptography Scheme," Journal of Electronic Science  |        | Circuits and Systems for Video Technology, Vol. 22, No. 6, pp. 799-810,   |
| Probabilistic Visual Cryptography Scheme," Journal of Electronic Science   |        | May, 2012. [SCI 5-year IF: 4. 682].                                       |
|  | 9.     | C.N. Yang and C.C. Wu, and F. Liu, "Construction of General (k, n)        |
| and Technology, Vol. 9. Issue 4, pp. 317-324. Dec., 2011 findexed by   |        | Probabilistic Visual Cryptography Scheme," Journal of Electronic Science  |
| and recimology, von y, issue 1, pp. 517 521, Been, 2011.[mached by   |        | and Technology, Vol. 9, Issue 4, pp. 317-324, Dec., 2011.[indexed by      |
| INSPEC].   |        |   |

[Conference Papers]

| 項次 | 論文名稱   |
|----|--|
| 1. | S.Y. Tsai, C.C. Wu, C.N. Yang, and Y. C. Chou, "Development and Field  |
|    | Trial of Electronic Medical Record with Picture Processing Capabilities,"  |
|    | Healthcare'17 (The 2017 International Conference on Healthcare Science   |
|    | and Engineering), Zhengzhou, China, June, 2017.  |
| 2. | C.N. Yang, C.C. Wu, and C.W. Chou, "A comment on "sharing secret   |
|    | images using Blakley's concept"," The Ninth International Conference on  |
|    | Intelligent Information Hiding and Multimedia Signal Processing (IIHMSP  |
|    | 2013), pp. 383-386, Beijing, China, Oct., 2013.  |
| 3. | C.N. Yang, Y.C. Lin, and C.C. Wu, "Region-in-Region Incrementing Visual  |
|    | Cryptography Scheme," LNCS 7809, pp. 449-463, IWDW 2012, (11-th  |
|    | International Workshop on Digital-forensics and Watermarking), Shanghai,   |
|    | China, Oct., 2012.   |
| 4. | S. Cimato, C.N. Yang, and C.C. Wu, "Visual Cryptography based  |
|    | Watermarking:Definition and Meaning," LNCS 7809, pp. 435-448, IWDW   |
|    | 2012, (11-th International Workshop on Digital-forensics and   |
|    | Watermarking), Shanghai, China, Oct., 2012.  |
| 5. | C.N. Yang, G.C. Wu, and C.C. Wu, "Certificate-in-Certificate: Designing A  |
|    | New Certificate Extension for Mobile-Commerce," The 2011 International   |
|    | Conference on e-Commerce, e-Administration, e-Society, e-Education, and  |
|    | e-Technology (e-CASE & e-Tech 2011), pp. 554-564, Tokyo, Japan, Jan.,  |
| 6  | 2011.  |
| 6. | C.N. Yang, Y.C. Kun, J.Y. He, and C.C. Wu, "A Practical Implementation of Terrogram Overs, Tree for PEID Tog. Anti-Collision." The 2010 IEEE |
|    | of Ternary Query Tree for RFID Tag Anti-Collision," The 2010 IEEE International Conference on Information Theory and Information Security    |
|    | (ICITIS 2010), pp. 283-286, Beijing, China, Dec., 2010.  |
| 7. | C.N. Yang, C.C. Wu, C.Y. Chiu, S.Y. Chiou, and W.C. Liao,  |
| '. | "Micropayment Schemes with Ability to Return Changes," The 11th  |
|    | International Conference on Information Integration and Web-based  |
|    | Applications & Services (iiWAS2009), pp. 354-361, Kuala Lumpur,  |
|    | Malaysia, Dec., 2009.  |
| 8. | C.N. Yang, C.S. Laih, C.C. Wu, and G.C. Wu, "RWSIS: (R)FID-enabled   |
|    | (W)arranty (S)ervice (I)nformation (S)ystem on Resolving Security and  |
|    | Privacy," The 2009 International Symposium on IT and its Applications  |
|    | (ITA-09) in conjunction with IEEE CSA 2009, pp. 452-456, Jeju Island,  |
|    | Korea, Dec., 2009.   |
| 9. | C.N. Yang, C.C. Wu, and C.W. Chou, "A comment on "sharing secret   |

images using Blakley's concept"," The Ninth International Conference on Intelligent Information Hiding and Multimedia Signal Processing (IIHMSP 2013), pp. 383-386, Beijing, China, Oct., 2013.

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