

Jason Lin

Harvey R Bright Building (Room 503B)

College Station, TX 77843-3112

E-mail: senyalin@tamu.edu

Research Interests

Scientific Document Analysis, Geospatial Intelligence, and Quantum Cryptography

Education

Ph.D., now. Computer Science and Engineering, Texas A&M University, College Station, TX

Dissertation: “*The Study of Mathematical Expression-based Document Signature*”

Advisor: Dr. Jyh-Charn (Steve) Liu

M.S., 2011. Computer Science and Information Engineering, National Cheng Kung University, Tainan, Taiwan

Thesis: “*Quantum Secret Sharing Protocols*”

Advisor: Dr. Tzonelih Hwang

B.S., 2009. Information Engineering and Computer Science, Feng Chia University, Taichung, Taiwan

Project: “*A New Secure Data Hiding Scheme by Using a Secret Location Map*”

Advisor: Dr. Wei-Bin Lee, Dr. Tung-Shou Chen

Refereed Journal Publications

1. S.-H. Kao, J. Lin, C.-W. Tsai, and T. Hwang, “An improved protocol for controlled deterministic secure quantum communication using five-qubit entangled state” to appear in *International Journal of Theoretical Physics*, Vol. 57, No 6, pp. 1894-1902, Mar 2018 (IF = 0.968).
2. C.-W. Tsai and J. Lin, “Fault-tolerant remote quantum entanglement establishment for secure quantum communications,” *International Journal of Theoretical Physics*, Vol. 55, No. 7, pp. 3200-3206, July 2016 (IF = 0.968).
3. J. Chen, T.-S. Chen, C.-N. Lin, S.-Y. Chen, and J. Lin, “A simple JPEG-LS compressed technique for 2DGE image with ROI emphasis”, *The Imaging Science Journal*, Vol. 63, No. 2, pp. 76-80, Feb 2015 (IF = 0.366).
4. J. Lin, C.-W. Yang, and T. Hwang, “Quantum private comparison of equality protocol without a third party,” *Quantum Information Processing*, Vol. 13, No. 2, pp. 239-247, Feb 2014 (IF = 2.283).
5. J. Lin and T. Hwang, “Bell state entanglement swappings over collective noises and their applications on quantum cryptography,” *Quantum Information Processing*, Vol. 12, No. 2, pp.1089-1107, Feb 2013 (IF = 2.283).
6. J. Lin and T. Hwang, “New circular quantum secret sharing for remote agents,” *Quantum Information Processing*, Vol. 12, No. 1, pp. 685-697, Jan 2013 (IF = 2.283).
7. J. Lin, C.-W. Yang, C.-W. Tsai, and T. Hwang, “Intercept-resend attacks on semi-quantum secret sharing and the improvements,” *International Journal of Theoretical Physics*, Vol. 52, No. 1, pp. 156-162, Jan 2013 (IF = 0.968).

8. H.-Y. Tseng, J. Lin, and T. Hwang, "New quantum private comparison protocol using EPR pairs," *Quantum Information Processing*, Vol. 11, No. 2, pp. 373-384, Apr 2012 (IF = 2.283).
9. J. Lin, H.-Y. Tseng, and T. Hwang, "Intercept-resend attacks on Chen et al.'s quantum private comparison protocol and the improvements," *Optics Communications*, Vol. 284, No. 9, pp. 2412-2414, May 2011 (IF = 1.887).
10. J. Lin and T. Hwang, "An enhancement on Shi et al.'s multiparty quantum secret sharing protocol," *Optics Communications*, Vol. 284, No. 5, pp. 1468-1471, Mar 2011 (IF = 1.887).

Refereed Conferences

1. M. Rugh, X. Wang, J. Lin, L. Barroso, M. Capraro, and R. Capraro, "Computer Generated Dynamic Graphic Organizer's Effect on Learning Outcomes," Proposal accepted to the National Council of Teachers of Mathematics Research Conference, San Diego, California, Apr. 1-3, 2019.
2. X. Wang, J. Lin, R. Vrecenar, and J.-C. Liu, "QuQn Map: Qualitative-Quantitative mapping of scientific papers," to appear in *Proceedings of the 18th ACM Symposium on Document Engineering*, Halifax, Nova Scotia, Canada, Aug. 28-31, 2018.
3. J. Lin, X. Wang, and J.-C. Liu, "Prediction of mathematical expression constraints (ME-Con)," to appear in *Proceedings of the 18th ACM Symposium on Document Engineering*, Halifax, Nova Scotia, Canada, Aug. 28-31, 2018.
4. X. Wang, J. Lin, R. Vrecenar, and J.-C. Liu, "Syntactic role identification of mathematical expressions," *Proceedings of the Twelfth International Conference on Digital Information Management*, pp. 179-184, Fukuoka, Japan, Sept 12-14, 2017.
5. X. Wang, J. Lin, S. George, and J.-C. Liu, "DT-GIS system for tactical pattern exploration in asymmetric conflicts," *Proceedings of the 20th International Command and Control Research and Technology Symposium*, Annapolis, Maryland, June 16-19, 2015.
6. J. Lin, X. Wang, B. Qu, S. George, and J.-C. Liu, "Strategic planning and tactical situational awareness using MECH," *Proceedings of the 20th International Command and Control Research and Technology Symposium*, Annapolis, Maryland, June 16-19, 2015.
7. X. Wang, S. George, J. Lin, and J.-C. Liu, "Quantifying tactical risk: A framework for statistical classification using MECH," *Proceedings of the 8th International Conference on Social Computing, Behavior-Cultural Modeling and Prediction*, Washington, D.C., Mar 31-Apr 3, 2015, LNCS Vol. 9021, pp. 446-451.
8. J. Lin, B. Qu, X. Wang, S. George, and J.-C. Liu, "Risk management in asymmetric conflict: using predictive route reconnaissance to assess and mitigate threats," *Proceedings of the 8th International Conference on Social Computing, Behavior-Cultural Modeling and Prediction*, Washington, D.C., Mar 31-Apr 3, 2015, LNCS Vol. 9021, pp. 350-355.
9. C.-N. Lin, C.-C. Chang, W.-B. Lee, and J. Lin, "A novel secure data hiding scheme using a secret reference matrix," *Proceedings of the Fifth International Conference on Intelligent Information Hiding and Multimedia Signal Processing*, Kyoto, Japan, Sept 12-14, 2009, pp. 369-373 (EI).

Technical Report

1. S. George, X. Wang, J. Lin, B. Qu, and J.-C. Liu, “MECH: Algorithms and tools for automated assessment of potential attack locations,” TR 2015-10-06, Department of Computer Science and Engineering, Texas A&M University, College Station, 2015.

Professional Experiences

2014-2019: Teaching Assistant, Texas A&M Engineering Experiment Station

- CSCE-121: Introduction to Program Design and Concepts (Fall 2018) (Spring 2019)
- CSCE-221: Data Structures and Algorithms (Spring 2016)
- CSCE-411/629: Design and Analysis of Algorithms (Spring 2015) (Fall 2015)
- CSCE-222: Discrete Structures for Computing (Fall 2014)

2013-2018: Research Assistant, Texas A&M Engineering Experiment Station

- “Probabilistic Forecast Tracking and Calibration Software System”, Apache Corporation
- “Context-Aware Mission Auditing System”, AFRL
- “MECH: Algorithms and Tools for Automated Assessment of Potential Attack Locations”, ONR

Selected Honors

2015: SBP Student Travel Award

2010: National Finalist, Microsoft Imagine Cup, Creative Digital Group

2009: First Prize Award, Chunghwa Telecom Innovation & Application Contest, MOD Group

Professional Services

2012-2019: Reviewer, Quantum Information Processing

2015-2016: Reviewer, International Journal of Theoretical Physics

Activities

- Captain, Taiwanese Badminton Club, 2015-2016
- Member, Taiwanese Student Association, 2013-2019