Ting Gu

Computer Science Department, Elizabethtown College · (859) 338-6543 · ting.gu256@gmail.com

EDUCATION

University of Kentucky, Lexington, USA *May. 2016*
Ph.D. in Computer Science
Dissertation: Statistical Properties of Psedorandom Sequences

Central China Normal University (*CCNU*), Wuhan, China *Jun. 2010*
M.E. in Computer Science
Thesis: Research on Network Security Evaluation Based on Attack Graph

B.S. in Computer Science at ***CCNU*** *Jun. 2007*
Recommended to Master Program with high distinctness (selection rate: 1.6%)

WORKING EXPERIENCE AND TRAINING

Assistant Professor, Elizabethtown College *July 2016 - present*
CS 113 The Power and Beauty of Computing (online)
CS 121 Computer Science I
CS 309 Database Systems
CS 341 Software Engineering
CS 363 Computer Security
CS 322 Algorithms
CS 490 Senior Project

Teaching Assistant, University of Kentucky
Introduction to Computer Programming - Fall 2013 to Fall 2014
Introduction to Computers - Fall 2015 to Spring 2016

Research Assistant, University of Kentucky *Aug. 2010 - Jul. 2013 & Aug. 2014 - May. 2016*

Research Assistant, Central China Normal University *Augest 2007 - June 2010*

Graduate Certificate in College Teaching and Learning *Date awarded: May 2015*
Graduate School, University of Kentucky

PUBLICATIONS

- Zhixiong Chen, **Ting Gu**, and Andrew Klapper. On the q-bentness of Boolean functions. Designs, Codes and Cryptography, May, 2018.

- Tim McDevitt, Jessica Lehr and **Ting Gu**. A Parallel Time-Memory Tradeoff Attack on the Hill Cipher, Cryptologia, January, 2018.

- **Ting Gu**, Zhixiong Chen, and Andrew Klapper. Correlation Immune Functions with Respect to the q-transform. Cryptography and Communications, 10.6 (2018):1063-1073.

- **Ting Gu**, and Andrew Klapper. Statistical Properties of Half-ℓ-Sequences. Cryptography and Communications, 8.3 (2016):383-400.

- **Ting Gu**, and Andrew Klapper. Distribution Properties of Half-ℓ-Sequence, Sequences and Their Applications - SETA 2014. Springer International Publishing, 2014. 234-245.

- **Ting Gu**, Debao Xiao, Xuejiao Liu, and Xue Xia. Multilevel Event Correlation based on Collaboration and Temporal Causal Correlation, 5th International Conference on Wireless Communications, Networking and Mobile Computing (WiCom'09). IEEE, 2009. 1-4.

- Liu, Xuejiao, Debao Xiao, **Ting Gu**, and Hui Xu. Scenario Recognition based on Collaborative Attack Modeling in Intrusion Detection, Proceedings of 3rd International MultiConference of Engineers and Computer Scientists, IAENG Press, Hongkong, P.R. China, 2008, pp. 378-382.
- Xia Xue, Xiao Debao, and **Ting Gu**. Towards Alert Verification using Ontology-based Context Classification in Event Correlation Process, Journal of Beijing Jiaotong University, 32.6(2008):116-122.

PRESENTATIONS

- **Ting Gu**. Correlation immune functions with respect to the q-transform, Joint Mathematics Meetings, Baltimore, Maryland, Jan. 16, 2019.
- **Ting Gu**. Correlation attacks against stream ciphers, EPaDel section of the MAA, Shippensburg University, Nov. 18, 2017.
- **Ting Gu**. Analysis of the Statistical Power of Correlation Attacks on Nonlinear Combiners, Millersville University and Franklin & Marshall College Joint Colloquium, Oct. 19, 2017.
- **Ting Gu**. Distribution properties of FCSR sequences, Keeping Current Seminar, Computer Science Department, University of Kentucky, Mar. 2015.
- Zhaohong Wang, **Ting Gu**, Sen-ching Cheung. A Theoretical Framework for Distributed Secure Outsourced Computing Using Secret Sharing, Poster Presentation in IEEE International Workshop on Information Forensics and Security (WIFS), Dec, 2014, Atlanta, USA.
- **Ting Gu**. Replacing Linear Feedback Shift Register (LFSR) by FCSR in stream cipher design, 26th Annual Eastern Kentucky University Symposium in Mathematical, Statistical and Computer Sciences, Richmond, KY, Mar, 2013.
- **Ting Gu**. Multilevel Event Correlation based on Collaboration and Temporal Causal Correlation. 5th International Conference on Wireless Communications, Networking and Mobile Computing. Sep, 2009, Beijing, China.
- **Ting Gu**. Towards Alert Verification using Ontology-based Context Classification in Event Correlation Process. Cross-Strait Conference on Information Science and Technology. Dec, 2008, Beijing, China.

GRANTS

- $950 grant to attend to the Topological Data Analysis: Theory and Applications, June 12-16, 2017, at Macalaster College in St. Paul, MN
- $995 grant to attend STEM-UP PAs Leadership Development for Academic Women Program Spring 2017 Cohort
- $4960 2017 Summer Scholarship, Creative Arts and Research Program (SCARP) award for undergraduate summer research project at Elizabethtown College
- $595 NSF grant support to attend Cloud Security Curriculum Development Workshop at UNC-Chapel Hill, Chapel Hill, NC, July 13-15, 2016
- $792 NSF travel grant support to attend POGIL Southwest Regional Workshop at Santa Clara University, Santa Clara, CA, June 28-30, 2016
- $500 travel grant to attend New Educators Workshop at SIGCSE 2016, Memphis, Tennessee
- $1000 Thaddeus B. Curtz Memorial Scholarship Award, Apr. 2013
- Student travel support from Graduate School Fellowship, University of Kentucky, 2014
- Student travel support from Computing Research Association-Woman (CRA-W), which aims at increasing the success & participation of women in computing research, 2013

PROFESSIONAL SERVICE

- Chair of the independent study committee, Spring 2019
- Academic Council, Spring 2019-Spring 2021
- Reviewer for IEEE Transactions on Information Theory, 2018
- Computer Science Club advisor, Fall 2018 - present
- Core Committee, Spring 2018
- Search Committee for new computer science faculty, Fall 2017 - Spring 2018, Fall 2018 - Spring 2019
- Student Volunteer at SIGCSE 2016, Memphis, Tennessee
- Reviewer for Sequence and their application (SETA) 2016
- Reviewer for IEEE Transactions on Information Theory, 2015
- Reviewer for IEEE Transactions on Information Forensics & Security, 2015, 2016
- Reviewer for Signal Processing: Image Communication, 2015
- Micro-teaching Group Leader for training 10 new graduate teaching assistants in University TA Orientation, 2015
- Invited Speaker for sharing teaching experience in University TA Orientation, 2014 - 2015
- Volunteer for Girls Enjoy Math and Science Program (GEMS), 2013 - 2015
- Volunteer for Leestown Middle School's Science Night, 2014