

EDUCATION

PhD of Computer Science, *Jilin University*, Changchun, China September 2011 - June 2016

Emphasis on Cyber Forensics and Cyber Security.

Master of Computer Science (Masters Program en route to PhD), *Jilin University*, Changchun, China
September 2009 - June 2011

Emphasis on Cyber Security.

Bachelor of Software Engineering, *Northeast Normal University*, Changchun, China September 2005 - June 2009

Emphasis on Software Engineering.

TEACHING/WORKING EXPERIENCE

Assistant Professor in Practice, *University of Texas at San Antonio*, San Antonio, TX Aug. 2018 - present

- (IS-3033) Operating Systems Security Fall 2018 – present
- (IS-4483) Digital Forensic Analysis I Fall 2018 – present
- (IS-4523) Digital Forensic Analysis II Fall 2019 – present

Postdoctoral fellow, *University of Texas at San Antonio*, San Antonio, TX Sept. 2017 - Jul. 2018

- (IS 2043) Intermediate Object-Oriented Programming Spring 2018
- (IS 2041) Intermediate Object-Oriented Programming Laboratory Spring 2018
- Guest lecture for IS-6363 Computer Forensics Spring 2018

Postdoctoral fellow & adjunct faculty, *University of New Haven*, West Haven, CT Jun. 2016 - Aug. 2017

- (CSCI 6670) Reverse Engineering Spring 2017
- Guest lecture for Introduction to Cyber Forensic Science Fall 2016
- Guest lecture for Introduction to Computer Security Fall 2016

PUBLICATIONS

Journal papers

1. **Xiaolu Zhang**, Kim-Kwang Raymond Choo, Charles Zhechao Liu, Jesus A. Alvarado. “A design science approach to developing an integrated mobile app forensic framework” *Computer & Security* (2020). (Under review)
2. Dongming Sun, **Xiaolu Zhang**, Kim-Kwang Raymond Choo, Liang Hu, Feng Wang. “An Effective Machine Learning-Based Platform for Social Network Forensics” (2020). (Under review)
3. **Xiaolu Zhang**, Kim-Kwang Raymond Choo, and Nicole Lang Beebe. “How do I share my IoT forensic experience with the broader community? An automated knowledge sharing IoT forensic platform.” *IEEE Internet of Things Journal* (2019).
4. **Xiaolu Zhang**, Justin Grannis, Ibrahim Baggili, and Nicole Lang Beebe. “Frameup: An incriminatory attack on storj: A peer to peer blockchain enabled distributed storage system.” *Digital Investigation* (2019).
5. Courtney Hassenfeldt, Shabana Baig, Ibrahim Baggili, and **Xiaolu Zhang**. ”Map My Murder: A Digital Forensic Study of Mobile Health and Fitness Applications.” In *Proceedings of the 14th International Conference on Availability, Reliability and Security*, p. 42. ACM, August 26 - 29, 2019.
6. **Xiaolu Zhang**, Ibrahim Baggili, and Frank Breitingner. “Breaking into the vault: Privacy, security and forensic analysis of Android vault applications.” *Computers & Security* 70 (2017): 516-531.
7. **Xiaolu Zhang**, Ibrahim Baggili and Frank Breitingner. “Rapid Android Parser for Investigating DEX files (RAPID).” *Digital Investigation* 17 (2016): 28-39.
8. **Xiaolu Zhang**, et al. “Windows volatile memory forensics based on correlation analysis.” *Journal of Networks* 9.3 (2014): 645-652.
9. Liang Hu, Shinan Song, **Xiaolu Zhang**, et al. “Analyzing Malware based on volatile memory.” *Journal of Networks* 8.11 (2013): 2512-2519.

10. **Xiaolu Zhang**, et al. “An intelligent analysis model for multisource volatile memory.” *Journal of Networks* 8.11 (2013): 2699-2705.
11. Hu, Liang, Wenbo Wang, Feng Wang, **Xiaolu Zhang**, and Kuo Zhao. “The Design and Implementation of Composite Collaborative Filtering Algorithm for Personalized Recommendation.” *Journal of Software* 7, no. 9 (2012): 2040-2045.

Conference papers

1. **Xiaolu Zhang**, Oren Upton, Nicole Lang Beebe, Kim-Kwang Raymond Choo. “IoT Malware Forensics: a Digital Forensic Case Study on Mirai Botnet IoT Malware Forensic” *DFRWS EU* (2020).
2. Brandon knieriem, **Xiaolu Zhang**, Philip Levine, Frank Breitingner and Ibrahim Baggili. “An Overview of the Usage of Default Passwords”, *International Conference on Digital Forensics & Cyber Crime (ICDF2C 2017)*.
3. Hu, Liang, **Xiaolu Zhang**, Feng Wang, WenBo Wang, and Kuo Zhao. “Research on the Architecture Model of Volatile Data Forensics.” *Procedia Engineering* 29 (2012): 4254-4258.
4. Hu, Liang, Zhen Wei, Feng Wang, **Xiaolu Zhang**, and Kuo Zhao. “An efficient AC algorithm with GPU.” *Procedia Engineering* 29 (2012): 4249-4253.

Book/book chapter (authored/edited)

1. **Xiaolu Zhang**, Kim-Kwang Raymond Choo, “Digital Forensic Education: An Experiential Learning Approach”, *Big Data* book series, Springer 2019. (edited book)
2. **Xiaolu Zhang**, Timothy T. Yuen, and Kim-Kwang Raymond Choo. “Experiential Learning in Digital Forensics.” In *Digital Forensic Education*, pp. 1-9. Springer, Cham, 2019. (book chapter)
3. **Xiaolu Zhang**, and Kim-Kwang Raymond Choo. “The Way Forward.” In *Digital Forensic Education*, pp. 305-307. Springer, Cham, 2019. (book chapter)

UNDERGOING RESEARCH PROJECTS

- IoT malware security & forensics.
- Cyber security & forensics on social network.
- Cyber security & forensics on VR (Virtual Reality)

SERVICE

Organization

- Publicity Chair, Proceedings of the 2019 ACM International Symposium on Blockchain and Secure Critical Infrastructure

Program Committee Member

- IEEE IDS 2020
- The 14th International ARES Conference on Availability, Reliability and Security (2019)
- National Cyber Summit (NCS 19)
- The ADFSL Conference on Digital Forensics, Security and Law 2018
- The 17th IEEE International Conference On Trust, Security And Privacy In Computing And Communications (TrustCom 18)

Reviewer for Journals

- IEEE IoT Journal
- Computer & Security
- IEEE Security & Privacy
- WIREs Forensic Science
- IEEE Transaction on Big Data
- Future Generation Computer Systems
- Digital Communications and Networks
- Annals of Telecommunications

Reviewer for Conferences

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|---|------|
| • Fifteenth Annual IFIP WG 11.9 International Conference on Digital Forensics | 2019 |
| • 27th ACM Conference on User Modelling, Adaptation and Personalization | 2019 |
| • Annual ADFSL Conference on Digital Forensics, Security and Law (ADFSL) | 2018 |
| • The 3rd IEEE International Conference Collaboration and Internet Computing | 2017 |
| • Eleventh International Conference on Systematic Approaches to Digital Forensics Engineering (SADFE) | 2016 |

AWARDS AND HONORS

- Government Scholarship for joint PhD student funded by China Scholarship Council August 2013 - June 2015
- China General Chamber of Commerce (CGCC) Science and Technology Award 2013
- Full scholarship for joint master & PhD student – Jilin University 2009 - 2016
- Postgraduate Candidates Exempt from Admission Exam. 2009
- Silver Medal in the sixth “Challenge Cup” National Undergraduate Business Plan Competition 2008
- Principal Scholarships (5%) – Northeast Normal University 2008

MEDIA CONCENTRATION

- [Forensic Engineers Help Crack Case](#)
- [Massachusetts man arrested again for voyeurism in CT](#)
- [Forensic Magazine: Connecticut Cops, University of New Haven Digital Forensic Collaboration Snags Upskirt Voyeur](#)
- [NBC: Man Accused of Upskirt Voyeurism Arrested on More Charges](#)

ATTENDANCE

National Workshop on Redefining Cyber Forensics (National Science Foundation funded) 2017

REFERENCES

Prof. Dr. Nicole Lang Beebe

- Melvin Lachman Distinguished Professor at Department of Information Systems and Cyber Security at The University of Texas at San Antonio
- e-mail: nicole.beebe@utsa.edu

Prof. Dr. Kim-Kwang Raymond Choo

- Associate Professor at Department of Information Systems and Cyber Security at The University of Texas at San Antonio
- e-mail: Raymond.Cho@utsa.edu

Prof. Dr. Frank Breitingner

- Assistant Professor, Hilti Chair for Data and Application Security at Institute of Information Systems, University of Liechtenstein
- e-mail: frank.breitingner@uni.li

Prof. Dr. Ibrahim (Abe) Baggili

- Elder Family Endowed Chair, Associate Professor, Assistant Dean at Tagliatela College of Engineering at the University of New Haven
- Co-Director & Founder, Cyber Forensics Research and Education Group (UNHcFREG)
- e-mail: IBaggili@newhaven.edu