Attila Altay Yavuz, Ph.D.

CONTACT INFORMATION

4202 E Fowler Ave, ENG 117,
Tampa, FL 33620, USA

Voice: +1-813-974-0419
E-mail: attilaayavuz@usf.edu
URL: http://www.csee.usf.edu/~attilaayavuz/

EDUCATION

North Carolina State University (NCSU) , Raleigh, North Carolina, USA,
Ph.D., Computer Science, January 2007-August 2011,
Thesis: Compromise Resilient and Compact Cryptographic Constructions for Digital Forensics,
Advisor: Prof. Dr. Peng Ning

Bogazici University, Istanbul, Turkey,
M.S., Computer Science, September 2004-June 2006,

Yildiz Technical University, Istanbul, Turkey,
B.S., Computer Science and Engineering, 2004,

PROFESSIONAL EXPERIENCES

- **Assistant Professor**, The Department of Computer Science and Engineering, University of South Florida (August 2018 - present).
- **Assistant Professor**, School of Electrical Engineering and Computer Science, Oregon State University (September 2014 - August 2018, continues as an affiliated faculty to present).
- **Adjunct Faculty**, University of Pittsburgh, School of Information Sciences, (2014-present).
- **Research Scientist**, Bosch Research and Technology Center (2011-2014).
- **Research and Teaching Assistant**, Department of Computer Science, NC State University, Cyber Defense Laboratory (2007-2011).
- **Research Engineer**, Satellite Networks Research Laboratory, Bogazici University (2004-2006).
- **Intern**, Department of Computer Science, NC State University, 2003.

EXPERTISE

Dr. Yavuz is interested in design, analysis and application of cryptographic tools and protocols to enhance the security of computer systems. His current research focuses on privacy enhancing technologies (e.g., searchable encryption, oblivious random access memory, distributed PIR), trustworthy cloud computing, digital signatures, light-weight cryptography and cryptographic protocols for critical systems (e.g., aerial unmanned systems, smart-grid).

FUNDED RESEARCH

I have secured $2,352,246 in total with $1,064,764 on my share.

- **NSF CAREER: Lightweight and Fast Authentication for Internet of Things**
  Attila A. Yavuz (Sole PI), National Science Foundation Award No. CNS 1652389
  03/2017 - 02/2022, Total: $500,000

- **Lightweight and Quantum-Safe Authentication for Internet of Things**
  Sole-PI, Cisco Research Award
  06/2019 - 09/2020, Total: $60,306

- **Low-cost, Scalable and Practical Post Quantum Key Distribution**
  Sole-PI (sub-award), Department of Energy, Cyber Resilient Energy Delivery Consortium
  03/2019 - 09/2020, Total: $75,000

- **Cloud Security Technologies and Oblivious Random Access Machine**
  Attila A. Yavuz (Sole-PI), Unrestricted Gift, Robert Bosch
  12/2018 - present, Total: $50,000

- **Lightweight, Delay-Aware and Scalable Cryptographic Services for Smart-Grids**
  Co-PI, Department of Energy, Cyber Resilient Energy Delivery Consortium
  09/2015 - 07/2018, Total: $1,530,040, my share: $167,558

- **Towards Practical Privacy Enhancing Technologies**
  Attila A. Yavuz (Sole-PI), Unrestricted Gift, Robert Bosch
  09/2014 - 09/2018, Total: $175,000

- **NSF Travel Grant**
  Attila A. Yavuz (Sole-PI), National Science Foundation Award No. CNS - 1821203
  01/11/2018, Total: $18,000

- **NVIDIA Equipment Grant**
  Attila A. Yavuz (Sole-PI), Total: $4,500

- **OSU EECS RIU Initative**
  Attila A. Yavuz (PI), 04/2017 - 12/2017, Total: $14,400

Publications

In my field, it is typical for faculty members to appear after their advisees in authorship lists. Below, my advisees are underlined for clarity.

Journal Papers

1. Muslum O. Ozmen and **Attila A. Yavuz**, "Ultra Lightweight Multiple-time Digital Signature for the Internet of Things Devices", *IEEE Transactions on Services Computing*, July 2019.
2. Thang Hoang, **Attila A. Yavuz**, Fatma B. Durak, and Jorge Guajardo, "A Multi-server Oblivious Dynamic Searchable Encryption Framework", *Journal of Computer Security*, May 2019.
3. Mohamed Grissa, **Attila A. Yavuz** and Bechir Hamdaoui, "Location Privacy in Cognitive Radios with Multi-Server Private Information Retrieval", *IEEE Transactions on Cognitive Communications and Networking*, June 2019.
4. Thang Hoang, **Attila A. Yavuz**, and Jorge Guajardo, "A Secure Searchable Encryption Framework for Privacy-Critical Cloud Storage Services", *IEEE Transactions on Services Computing*, January 2019.
5. Thang Hoang, Ceyhun D. Ozkaptan, Gabriel Hackebeil, and **Attila A. Yavuz**, "Efficient Oblivious Data Structures for Database Services on the Cloud", *IEEE Transactions on Cloud Computing*, 2018.
6. Rouzbeh Behnia, Muslum O. Ozmen, and **Attila A. Yavuz**, "Lattice-Based Public Key Searchable Encryption from Experimental Perspectives", *IEEE Transactions on Dependable and Secure Computing (TDSC)*, 2018.
7. Mohamed Grissa, Bechir Hamdaoui and **Attila A. Yavuz**, "Unleashing the Power of Multi-Server PIR for Enabling Private Access to Spectrum Databases", *IEEE Communications Magazine*, vol. 56, no. 12, pp. 171-177, December 2018.

8. **Attila A. Yavuz**, Anand Mudgerikar, Ankush Singla, Ioannis Papapanagiotou and Elisa Bertino, "Real-Time Digital Signatures for Time-Critical Networks", in *IEEE Transactions on Information Forensics and Security*, vol. 12, no. 11, pp. 2627-2639, July 2017.
9. Mohamed Grissa, **Attila A. Yavuz** and Bechir Hamdaoui, "Location Privacy Preservation in Database-Driven Wireless Cognitive Networks Through Encrypted Probabilistic Data Structures", in *IEEE Transactions on Cognitive Communications and Networking*, vol. 3, no. 2, pp. 255-266, June 2017.
10. Mohamed Grissa, Bechir Hamdaoui and **Attila A. Yavuz**, "Location privacy in cognitive radio networks: a survey", in *IEEE Communications Surveys and Tutorials*, vol. 19, no. 3, pp. 1726-1760, thirdquarter 2017.
11. Mohamed Grissa, **Attila A. Yavuz** and Bechir Hamdaoui, "Preserving the Location Privacy of Secondary Users in Cooperative Spectrum Sensing", in *IEEE Transactions on Information Forensics and Security*, vol. 12, no. 2, pp. 418-431, February 2017.
12. Nadia Adem, Bechir Hamdaoui and **Attila A. Yavuz**, "Mitigating Jamming Attacks in Mobile Cognitive Networks Through Time Hopping", *Wireless Communications and Mobile Computing*, Wiley, vol. 16, issue 17, Pages 3004-3014, December 2016.
13. **Attila A. Yavuz**, "Immutable Authentication and Integrity Schemes for Outsourced Databases" *IEEE Transactions on Dependable and Secure Computing (TDSC)*, vol. 1, no.99, pp.1-14, February 2016.
14. Velin Kounev, David Tipper, **Attila A. Yavuz**, Brandon M. Grainger and Gregory F. Reed, "A Secure Communication Architecture for Distributed Microgrid Control", in *IEEE Transactions on Smart Grid*, vol. 6, no. 5, pp. 2484-2492, Sept. 2015.
15. Panos Kampanakis, **Attila A. Yavuz**, "BAFi: A Practical Cryptographic Secure Audit Logging Scheme for Digital Forensics", in *Wiley Security and Communication Networks*, vol. 8, no. 17, pp. 3180-3190, November 2015.
16. **Attila A. Yavuz**, "An Efficient Real-Time Broadcast Authentication Scheme for Command and Control Messages", *IEEE Transactions on Information Forensics and Security*, vol. 9, no. 10, pp. 1733-1742, October 2014.
17. **Attila A. Yavuz**, Peng Ning and Michael K. Reiter, "BAF and FI-BAF: Efficient and Publicly Verifiable Cryptographic Schemes for Secure Logging in Resource-Constrained Systems", *ACM Transaction of Information Systems Security*, vol. 15, issue 2, Article 9, 28 pages, July 2012.
18. **Attila A. Yavuz** and Peng Ning, "Self-sustaining, efficient and forward-secure cryptographic constructions for Unattended Wireless Sensor Networks", *Journal of Ad Hoc Networks*, vol. 10, issue 7, pp. 1204-1220, September 2012.
19. **Attila A. Yavuz**, Fatih Alagoz, and Emin Anarim,"A new multi-tier adaptive military MANET security protocol using hybrid cryptography and signcryption", *Turkish Journal of Electrical Engineering & Computer Sciences*, vol. 18, issue 1, January 2010.

International Conference Papers

1. Muslum O. Ozmen, Rouzbeh Behnia, and **Attila A. Yavuz**, "Energy-Aware Digital Signatures for Embedded Medical Devices", *7th IEEE Conference on Communications and Network Security (CNS)*, Washington, D.C., USA, June 2019.
2. Rouzbeh Behnia, Muslum O. Ozmen, and **Attila A. Yavuz**, "ARIS: Authentication for Real-Time IoT Systems", *IEEE International Conference on Communications (ICC 2019)*, Shanghai, China, May 2019.
3. Thang Hoang, Muslum O. Ozmen, Yeongjin Jang and **Attila A. Yavuz**, "Hardware-Supported ORAM in Effect: Practical Oblivious Search and Update on Very Large Dataset", *19th Privacy*

Enhancing Technologies Symposium (PETS 2019), July 2019, Stockholm, Sweden.

4. Mohamed Grissa, **Attila A. Yavuz**, and Bechir Hamdaoui, "TrustSAS: A Trustworthy Spectrum Access System for the 3.5 GHz CBRS Band", *IEEE International Conference on Computer Communications (IEEE INFOCOM 2019)*, April 2019, Paris, France.

5. Muslum O. Ozmen, Rouzbeh Behnia, and **Attila A. Yavuz**, "Fast Authentication from Aggregate Signatures with Improved Security". *International Conference on Financial Cryptography and Data Security (FC 2019)*, St. Kitts, February 2019.

6. Rouzbeh Behnia, Muslum O. Ozmen, **Attila A. Yavuz**, and Mike Rosulek, "TACHYON: Fast Signatures from Compact Knapsack", *The 25th ACM Conference on Computer and Communications Security (CCS)*, Toronto, Canada, October 2018.

7. Muslum O. Ozmen and **Attila A. Yavuz**, "Dronecrypt - An Ultra-Low Energy Cryptographic Framework for Small Aerial Drones", *The 37th IEEE International Conference for Military Communications (MILCOM)*, Los Angeles, CA, USA, October 2018.

8. Thang Hoang, **Attila A. Yavuz**, F. Betul Durak, and Jorge Guajardo, "Oblivious Dynamic Searchable Encryption on Distributed Cloud Systems", *The 32nd International conference on Data and Applications Security and Privacy (DBSec 2018)*, Bergamo, Italy, July 16-18, 2018. **(Best Paper Award)**

9. Muslum O. Ozmen, Rouzbeh Behnia and **Attila A. Yavuz**, "Compact Energy and Delay-aware Authentication", *6th IEEE Conference on Communications and Network Security (CNS)*, Beijing, China, May 30 June 1, 2018.

10. Muslum O. Ozmen, Thang Hoang and **Attila A. Yavuz**, "Forward-private Dynamic Searchable Symmetric Encryption with Efficient Search", *IEEE International Conference on Communications (ICC)*, Kansas City, MO, May 2018.

11. Thang Hoang, Ceyhun D. Ozkaptan, **Attila A. Yavuz**, Jorge Guajardo and Tam Nguyen, "S3ORAM: A Computation-Efficient and Constant Client Bandwidth Blowup ORAM with Shamir Secret Sharing", in *Proceedings of* ACM SIGSAC Conference on Computer and Communications Security (CCS), pp. 491-505, Dallas, TX, USA, October 30-November 03, 2017.

12. Muslum O. Ozmen and **Attila A. Yavuz**, "Low Cost Standard Public Key Cryptography Services for Wireless IoT Systems", *The first ACM CCS Workshop on Internet of Things Security and Privacy (IoT S&P)*, Dallas, TX, USA, November 2017.

13. Mohamed Grissa, **Attila A. Yavuz** and Bechir Hamdaoui, "When the Hammer Meets the Nail: Multi-Server PIR for Database-Driven CRN with Location Privacy Assurance", *5th IEEE Conference on Communications and Network Security (CNS)*, Las Vegas, USA, October, 2017.

14. Rouzbeh Behnia, **Attila A. Yavuz** and Muslum O. Ozmen, "High-Speed High-Security Public Key Encryption with Keyword Search", *31th International conference on Data and Applications Security and Privacy (DBSec'17)*, pp. 365-385, Philadelphia, USA, July 2017.

15. Yousef Qassim, Mario E. Magana, and **Attila A. Yavuz**, "Post-Quantum Hybrid Security Mechanism for MIMO Systems", *International Workshop on Computing, Networking and Communications (CNC) - with International Conference on Computing, Networking and Communication (ICNC)*, Silicon Valley, California, USA, January 2017.

16. Thang Hoang, **Attila A. Yavuz** and Jorge Guajardo,"Practical and Secure Dynamic Searchable Encryption via Oblivious Access on Distributed Data Structure", in Proceedings of the *32nd Annual Computer Security Applications Conference (ACSAC 16)*, pp. 302-313, Los Angeles, California, USA, December 5-9, 2016.

17. Mohamed Grissa, **Attila A. Yavuz** and Bechir Hamdaoui, "An Efficient Technique for Protecting Location Privacy of Cooperative Spectrum Sensing Users", *IEEE Infocom Green and Sustainable Networking and Computing (GSNC 2016) Workshop*, pp. 915-920, San Francisco,

April 2016.

18. Nadia Adem, Bechir Hamdaoui and **Attila A. Yavuz**, "Pseudorandom Time-Hopping Anti-Jamming Technique for Mobile Cognitive Users", *IEEE International Workshop on Advances in Software Defined Radio Access Networks and Context-aware Cognitive Networks (SDRAN-CAN 2015)*, San Diego, CA, USA, December 2015.

19. Mohamed Grissa, **Attila A. Yavuz** and Bechir Hamdaoui, "Cuckoo Filter-Based Location-Privacy Preservation in Database-Driven Cognitive Radio Networks", *IEEE 2nd World Symposium on Computer Networks and Information Security*, Tunusia, September 2015.

20. Anand A. Mudgerikar, Ankush Singla, Ioannis Papapanagiotou and **Attila A. Yavuz**, "HAA: Hardware-Accelerated Authentication for Internet of Things in Mission Critical Vehicular Networks", *International Conference for Military Communications (MILCOM)*, pp. 1298–1304, Tampa, FL, USA, October 2015.

21. Mohamed Grissa, **Attila A. Yavuz** and Bechir Hamdaoui, "LPOS: Location Privacy for Optimal Sensing in Cognitive Radio Networks", *IEEE Global Communications Conference (IEEE Globecom 2015)*, pp. 1-6, San Diego, USA, December 2015.

22. **Attila A. Yavuz** and Jorge Guajardo, "Dynamic Searchable Symmetric Encryption with Minimal Leakage and Efficient Updates on Commodity Hardware", *Selected Areas in Cryptography (SAC) 2015*, pp. 241-259, Sackville, New Brunswick, Canada, August 2015.

23. **Attila A. Yavuz**, "Practical immutable signature bouquets (PISB) for authentication and integrity in outsourced databases", In Proceedings of the *27th international conference on Data and Applications Security and Privacy XXVII (DBSec'13)*, Springer-Verlag, Berlin, Heidelberg, pp. 179-194, Newark, USA, July 2013.

24. **Attila A. Yavuz**, "ETA: efficient and tiny and authentication for heterogeneous wireless systems". In Proceedings of the *sixth ACM conference on Security and privacy in wireless and mobile networks (WiSec '13)*, pp. 67-72, Hungary, Budapest, April 2013.

25. Benjamin Glas, Jorge Guajardo, Hamit Hacioglu, Markus Ihle, Karsten Wehefritz and **Attila A. Yavuz**, "Signal-based Automotive Communication Security and Its Interplay with Safety Requirements", *ESCAR, Embedded Security in Cars Conference*, Germany, November 2012.

26. **Attila A. Yavuz**, Peng Ning and Michael K. Reiter, "Efficient, Forward-secure and Append-only Cryptographic Constructions for Publicly Verifiable Audit Logging", *Financial Cryptography and Data Security (FC 2012)*, Lecture Notes in Computer Science (LNCS), vol. 7397, pp. 148-163, Bonaire, March 2012.

27. **Attila A. Yavuz** and Peng Ning, "BAF: An Efficient Publicly Verifiable Secure Audit Logging Scheme for Distributed Systems", in *Proceedings of the 25th Annual Computer Security Applications Conference (ACSAC '09)*, pp. 219-228, December 2009, Honolulu, Hawaii, USA.

28. **Attila A. Yavuz** and Peng Ning, "Hash-Based Sequential Aggregate and Forward Secure Signature for Unattended Wireless Sensor Networks", Annual International *Mobile and Ubiquitous Systems: Networking & Services, MobiQuitous*, pp. 13-16, Toronto, Canada, July 2009.

29. **Attila A. Yavuz**, Fatih Alagoz and Emin Anarim, "NAMEPS: N-Tier Satellite Multicast Security Protocol Based on Signcryption Schemes", *IEEE GLOBECOM Conference, San Francisco*, November 2006.

30. **Attila A. Yavuz**, Fatih Alagoz and Emin Anarim, "Three-Tier Satellite Security Multicast Security Protocol Based on ECMQV and IMC Methods", *Computer-Aided Modeling, Analysis and Design of Communication Links and Networks, (IEEE CAMAD'06)*, Italy, April 2006.

31. **Attila A. Yavuz**, Fatih Alagoz and Emin Anarim, "A New Satellite Multicast Security Protocol Based on Elliptic Curve Signatures," *2nd Information and Communication Technologies (ICTTA '06)*, 2006.

32. **Attila A. Yavuz**, Fatih Alagoz, Emin Anarim, "A New Multicast Security Protocol", *GAP, International V. Engineering Congress*, 2006.

33. **Attila A. Yavuz**, Fatih Alagoz and Emin Anarim, "HIMUTSIS: Hierarchical Multi-Tier Adaptive Ad-hoc Network Security Protocol Based on Signcryption Type Key Exchange Schemes", *ISCIS 2006 vol. 4263, Lecture Notes in Computer Science (LNCS)*, page 434-445, Springer-Verlag, November 2006.

34. **Attila A. Yavuz**, Emin Anarim and Fatih Alagoz, "Improved Merkle Cryptosystem", *ISCIS 2006 vol. 4263, Lecture Notes in Computer Science (LNCS)*, page 924-934, Springer-Verlag, Nov. 2006.

35. Goksel Biricik, **Attila A. Yavuz**, Omur Kartal, Oya Kalipsiz, "Developing Information System with N-Tier Architecture: Hospital Management Information System", *Biltek International Informatik Congress*, 2005.

Patents

1. **Attila A. Yavuz**, Muslum O. Ozmen and Rouzbeh Behnia, "Energy-Aware Digitial Signatures", USF-19A001, Provisional Patent Application No: 62/788,572, Submitted: January 4, 2019.

2. **Attila A. Yavuz**, "Sender Optimal, Breach-Resilient, and Post-Quantum Secure Cryptographic Methods and Systems for Digital Auditing", USF-18B167UTL, Provisional Patent Application No: 16/235,412, Submitted: January 4, 2019.

3. **Attila A. Yavuz**, "System and Method of Audit Log Protection", USF-18B164PR, Provisional Patent Application No: 16/207,127, Submitted: December 1, 2018.

4. **Attila A. Yavuz**, "Communication Efficient Key Exchange Methods for Internet of Things and Systems", USF-18B160PR, Provisional Patent Application No:62/750,337, November 2, 2018.

5. Muslum O. Ozmen, Hoang Thang, and **Attila A. Yavuz** "Forward-Private Dynamic Searchable Symmetric Encryption with Efficient Search", USF-18B151, OSU-17-55, Provisional Application No: 62/572,339, Submitted: October 10, 2017, Revised: 08/15/2018.

6. Mohamed Grissa, **Attila A. Yavuz**, Bechir Hamdaoui, "An Efficient Technique for Protecting Location Privacy of Cooperative Spectrum Sensing Users", OSU-16-14, DRAFT/072/16, Submitted: March 22, 2016.

7. Anand A. Mudgerikar, Ankush Singla, Ioannis Papapanagiotou and **Attila A. Yavuz**. "Hardware Accelerated Priority based Message Authentication for Vehicular Networks", USPTO: 62/201096 , Submitted: August 3, 2015.

8. **Attila A. Yavuz**, Jorge Guajardo and Anvesh Ragi, "System and method for dynamic, non-interactive, and parallelizable searchable symmetric encryption", Patent WO2015055762 A1, Priority Date: October 18, 2013, Filing Date: October 16, 2014, Issued: April 23, 2015.

9. Jorge Guajardo, **Attila A. Yavuz**, Benjamin Glas, Markus Ihle, Hamit Hacioglu, and Karsten Wehefrit, "System and method for counter mode encrypted communication with reduced bandwidth", Patent US 20140270163 A1, Filed: March 14, 2013, Issued: September 18, 2014.

10. **Attila A. Yavuz**. "System and Method for Secure Review of Audit Logs", USPTO: 62/006476, Filed: June 2, 2014.

11. **Attila A. Yavuz**, Jorge Guajardo, and Shalabh Jain, "System and method for mitigation of denial of service attacks in networked computing systems", Patent WO2014144555 A1, Filed: March 15, 2013, Issued: September 18, 2014.

12. **Attila A. Yavuz**, "System and method for message verification in broadcast and multicast networks", Patent US8667288 B2, Filed: May 29, 2012, Issued: March 4, 2014.

Presentations/Posters

1. **Attila A. Yavuz**, "Lightweight, Delay-Aware, and Scalable Cryptographic Services for Smart Grid Systems", *Cyber Resilient Energy Delivery Consortium*, March 2016, Illinois, USA.
2. Shauna Michelle Policicchio and **Attila A. Yavuz**, "Preventing Memory Access Pattern Leakage in Searchable Encryption", *iConference 2015 Proceedings*, March 2015, California, USA.
3. Anand A. Mudgerikar, Ankush Singla, Ioannis Papapanagiotou and **Attila A. Yavuz**,"Fast and Scalable Authentication for Vehicular Internet of Things", *16th Annual Information Security Symposium, CERIAS*, March 2015, West Lafayette, IN.

Edited Books Computer Simulation Techniques - The Definitive Intro with Prof. Dr. Harry Perros

TEACHING

I introduced two new courses to University of South Florida (USF) curriculum.

- COP 4538 IT Data Structures (Fall 2019)
- CIS 4930/6930: Privacy-Preserving and Trustworthy Cyber-Infrastructures (Spring 2019)
- COP 4931: Information Privacy and Trustworthy Systems (Fall 2018)

I introduced four new courses to Oregon State University (OSU) curriculum, and also taught many other courses.

- CS 519/ECE 599: Applied Cryptography (Winter 2015-2018)
- CS 478/ECE 478: Introduction to Network Security (Spring 2015-2018)
- CS 372/ECE 372: Introduction to Computer Networks (Spring 2017)
- CS/ECE 578: Cyber-security (Fall 2017)
- CS 519/ECE 559: Advanced Network Security (Fall 2014-2016)
- CS 505 Cyber-security Reading Seminar (Fall 2015)

MENTORING

I am privileged to work with the following talented students:

- **PhD Students**
  - Thang Hoang (Fall 2015 - present)
  - Rouzbeh Behnia (Fall 2016 - present)
  - Muslum Ozgur Ozmen (Fall 2016 - present)
  - Efe Seyigoglu (Fall 2018 - present)
  - Sadman Sakib (Fall 2019 - present)
- **Undergraduate Students**
  - Kelsy Ecclesiastre (BullsEYE - NSF CAREER, USF 2019)
  - Aaya Watson (BullsEYE - NSF CAREER, USF 2019)
  - Keanno Carter (NSF LSAMP, USF 2019)
  - Morgan Hausmann (WICSE Program - NSF CAREER, USF 2019)
  - Garrett Christophe Haley (EECS Capstone, OSU 2018)
  - Andrew Ekstedt (EECS Capstone, OSU 2018)
  - Scott Merrill (EECS Capstone, OSU 2018)

  - Scott Russell (EECS Capstone, OSU 2018)
  - Joshua Webb (NSF-FUND STEM Leaders Program, OSU 2017)
  - Nathan Burnett (EECS RIU Initiative, OSU 2017)
  - Matt Baker (EECS RIU Initiative, OSU 2017)
  - Erich Hansje Kramer (EECS RIU Initiative, OSU 2017)
- **Graduated**
  - Mohamed Grissa (Graduated with PhD, Fall 2018, Co-advised with Dr. Bechir Hamdaoui)
  - Muslum Ozgur Ozmen (Graduated, Spring 2018, continues as PhD)
  - Gungor Basa, "Image Based Cryptography", (Graduated with MS, Spring 2016)
  - Gabriel Hackebeil, "Efficient Oblivious Access to Trees", (Graduated with MS, Fall 2016)

Past Mentoring Experience: During my work at Robert Bosch Research and Technology Center and University of Pittsburgh, I found opportunity to work with the following students: Shalabh Jain, Velin Kounev, Alana Libonati, Shauna Michelle Policicchio and Anvesh Ragi.

Professional Services

Reviewer in Journals:

- IEEE Transactions on Information Forensics and Security (2014-2019).
- IEEE Transactions on Dependable and Secure Computing (2014-2018).
- ACM Transactions on Security and Privacy (2017).
- IEEE Transactions on Cloud Computing (2017).
- IEEE Transactions on Parallel and Distributed Systems (2014-2016).
- IEEE Transactions on Smart Grid (2014-2016).
- International Journal of Distributed Sensor Networks (2016).
- Future Generation of Computer Systems, Elsevier (2016)
- IEEE Transactions on Internet of Things (2015).
- IEEE Communications Surveys and Tutorials (2014-2015).
- IEEE Transactions on Education (2015).
- International Journal of Parallel, Emergent and Distributed Systems (2015).
- Journal of Sensors, Open Access Journal by MPDI (2015).
- Journal of Computer Security (2013-2014).
- International Journal of Communication Systems by Wiley (2013-2014).
- Journal of Algorithms, Open Access Journal by MPDI (2013).
- IEEE Transactions on Computers (2012-2014).
- Journal of Energies, Open Access Journal by MPDI (2012).
- Concurrency and Computation: Practice and Experience (2011).
- Journal of System and Software (2007-2011).
- IEEE Transactions on Information Technology in Biomedicine (2007).

Program Committee (PC) Member:

- Annual Computer Security Applications Conference (ACSAC), 2017-2019.
- Conference on Data and Applications Security and Privacy (DBSec), 2018-2019.

- 30th Annual Web Conference (WWW), 2019.
- Military Coomunications (Milcom) 2019.
- 2nd International Workshop on Security and Privacy for the Internet-of-Things (IoTSec), 2019.
- IIEEE SmartGridComm, 2018.
- IEEE IEMCON, 2018.
- IEEE International Workshop on Big Data Security and Services, 2018.
- ACM International Workshop on Trustworthy Embedded Devices (TrustED), 2014-2016.
- Advanced Intrusion Detection and Prevention Workshop (AIDP), 2014.
- 3rd International Workshop on Collaborative Cloud (CollabCloud), 2014.
- The Third ASE International Conference on Cyber Security, 2014.

Internal Services:

- CSE Graduate Committee at USF, (2018-present).
- EECS Graduate Curriculum Committee at OSU, 2014-2018.
- EECS Graduate Admissions Committee at OSU, 2014-2018.
- Ph.D. Thesis Committee
  - Longfei Wang, PhD, University of South Florida, (Defended 2018)
  - Brent Kramer, PhD, Oregon State University (Defended 2017)
  - Peter Byerley Rindal, PhD, Oregon State University (Defended 2017)
  - Sherif Abdelwahab, PhD, Oregon State University (Defended 2017)
  - Abdelkader Aljerme, PhD, Oregon State University (Defended 2016)
  - Bassem Khalfi, PhD, Oregon State University (current)
  - Mehiar Dabbagh, PhD, Oregon State University (Defended 2016)
  - Nadia Adem , PhD, Oregon State University (Defended 2016)
  - Velin Kouven, PhD, University of Pittsburgh, (Defended 2015)
- M.S. Thesis Committee
  - Shauna Policicchio, MS, University of Pittsburgh, (Defended 2015)
  - Zhangxiang Hu, MS, (Defended 2015)
  - Shajith Ravi, MEng, (Defended 2016)