

THE UNIVERSITY OF TEXAS AT AUSTIN
Cockrell School of Engineering
Standard Resume

FULL NAME: Mohit Tiwari **TITLE:** Assistant Professor

DEPARTMENT: Electrical and Computer Engineering

EDUCATION:

University of California, Santa Barbara	Computer Science	Ph.D.	July 2011
University of California, Santa Barbara	Computer Science	M.S.	July 2010
Indian Institute of Technology, Guwahati	Computer Science and Engineering	B. Tech.	June 2005

PROFESSIONAL REGISTRATION:

CURRENT AND PREVIOUS ACADEMIC POSITIONS:

University of Texas at Austin	Assistant Professor	Aug 2013 –
University of California, Berkeley	NSF Computing Innovation Post-doctoral Fellowship	Aug 2011 – July 2013

OTHER PROFESSIONAL EXPERIENCE:

University of California, Santa Barbara	Graduate Research Assistant	June 2006 – July 2011
Naval Postgraduate School, Monterey	Research Visitor	Aug 2008 – Sept 2008
NEC Laboratories, Princeton, NJ	Research Intern	June 2007- Aug 2007
University of California, Santa Barbara	Teaching Assistant	Sept 2005- May 2006

CONSULTING:

Intel, Hillsboro, OR	April 2018 –
Privasera Inc, Austin, TX	June 2015 –

HONORS AND AWARDS:

2019 – Best Paper Award Nominee, International Symposium on Hardware-Oriented Security and Trust (HOST)

2018 – Best Paper Award Runner-up, International Symposium on Hardware-Oriented Security and Trust (HOST)

2018 – Plenary Speaker, National Science Foundation workshop on Side- and Covert-Channels Security, Washington D.C.

2017 – Qualcomm Faculty Award, for technology transfer of MICRO'16 paper on hardware-based

- malware detection
- 2017 – AMD Chair (UT ECE Department)
- 2017 – Invited to teach at the International Summer School on Advanced Computer Architecture and Compilation for High-Performance and Embedded Systems (ACACES), Fiuggi, Italy
- 2016 – Keynote speaker, Workshop on Computer-Aided Design and Implementation for Cryptography and Security (CADICS) at the International Conference on Computer-Aided Design (ICCAD)
- 2015 – Best Paper Award, International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS)
- 2015 – National Science Foundation CAREER award
- 2015 – IEEE Micro Top Picks of the Year in Computer Architecture, Honorable Mention
- 2014 – Google Faculty Research Award
- 2013 – NYU-CSAW Best Applied Security Paper of the Year, top-10.
- 2011 – 2013 National Science Foundation Computing Innovation Postdoctoral Fellowship
- 2011 – Outstanding Dissertation Award, Department of Computer Science, UC Santa Barbara
- 2010 – IEEE Micro Top Picks of the Year in Computer Architecture
- 2009 – Best Paper Award, International Conference on Parallel Architectures and Compilation Techniques (PACT)
- 2006 – Outstanding Teaching Assistant, Dept. of Computer Science & Engineering, UC Santa Barbara

PROFESSIONAL SOCIETY AND MAJOR GOVERNMENTAL COMMITTEES:

- Program committee member for architecture-systems conferences
 - International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS) – 2015, 2018, 2019, 2020
 - International Symposium on Computer Architecture (ISCA) – 2014, 2015, 2019
 - International Symposium on Microarchitecture (MICRO) – 2015, 2018
 - International Symposium on High Performance Computer Architecture (HPCA) – 2015, 2017
 - International Conference on Code Generation and Optimization (CGO) – 2015
 - International Conference on Performance Analysis of Systems and Software (ISPASS) – 2015
- Program committee member for computer security conferences
 - International Conference on Computer and Communication Security (CCS) – 2015, 2016, 2017, 2018, 2019
 - International Symposium on Security and Privacy (S&P “Oakland”) – 2015, 2016, 2019
 - International Symposium on Hardware Oriented Security and Trust (HOST) – 2016, 2017, 2018
- Associate Editor for ACM Transactions on Architecture and Code Optimization (TACO) – 2017 – present
- NSF proposal panel reviewer for the Secure and Trustworthy Computing (SaTC) program – 2014, 2015, 2016, 2017, 2018, 2019
- Guest Editor, IEEE Micro Magazine (Special Issue on Security) – 2016, 2019
- Paper Reviewer for IEEE/ACM Conferences and Journals – ISCA, MICRO, ASPLOS, HPCA, CGO, ISPASS, S&P, CCS, PLDI, CAL, TACO, TOCS.

PUBLICATIONS:

Google Scholar link: <https://scholar.google.com/citations?user=FukOricAAAAJ&hl=en>

A. Refereed Archival Journal Publications

1. Mohit Tiwari, Xun Li, Hassan Wassel, Bitu Mazloom, Shashidhar Mysore, Frederic Chong, and Timothy Sherwood, "Gate-Level Information-Flow Tracking for Secure Architectures," *IEEE Micro Top Picks from Computer Architecture Conferences*, January-February 2010.
<https://doi.org/10.1109/MM.2010.17>
2. Wei Hu, Jason Oberg, Ali Irturk, Mohit Tiwari, Timothy Sherwood, and Ryan Kastner, "Theoretical Fundamentals of Gate Level Information Flow Tracking", *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)*, August 2011.
<https://doi.org/10.1109/TCAD.2011.2120970>
3. Hassan Wassel, Daoxin Dai, Luke Theogarajan, Jennifer Dionne, Mohit Tiwari, Jonathan Valamehr, Frederic Chong, and Timothy Sherwood, "Opportunities and Challenges of Using Plasmonic Components in Nanophotonic Architectures," *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*, June 2012.
<https://doi.org/10.1109/JETCAS.2012.2193934>
4. Wei Hu, Jason Oberg, Ali Irturk, Mohit Tiwari, Timothy Sherwood, Dejun Mu and Ryan Kastner, "On the Complexity of Generating Gate Level Information Flow Tracking Logic," *IEEE Transactions on Information Forensics and Security (TIFS)*, June 2012.
<https://ieeexplore.ieee.org/document/6159079/>
5. Bitu Mazloom, Shashidhar Mysore, Mohit Tiwari, and Timothy Sherwood, "Dataflow Tomography: Information Flow Tracking for Understanding and Visualizing Full Systems," *ACM Transactions on Architecture and Code Optimization (TACO)* September 2012.
<https://doi.org/10.1145/2133382.2133385>
6. Wei Hu, Dejun Mu, Jason Oberg, Baolei Mao, Mohit Tiwari, Timothy Sherwood, Ryan Kastner, "Gate Level Information Flow Tracking for Security Lattices," *ACM Transactions on Design Automation of Electronic Systems (TODAES)*, Volume 20, November 2014.
<https://doi.org/10.1145/2676548>
7. Pavel Lifshits, Roni Forte , Yedid Hoshen, *Matthew Halpern, Manuel Philipose*, Mohit Tiwari, and Mark Silberstein, "Power to peep-all: Inference Attacks by Malicious Batteries on Mobile Devices", in *Proceedings on Privacy Enhancing Technologies (PoPETs)*, July 2018.
<https://www.petsymposium.org/2018/files/papers/issue4/popets-2018-0036.pdf>

B. Refereed Conference Proceedings

1. Mohit Tiwari, Banit Agrawal, Shashidhar Mysore, Jonathan K Valamehr, and Timothy Sherwood, "A Small Cache of Large Ranges: Hardware Methods for Efficiently Searching, Storing, and Updating Big Dataflow Tags," *Proceedings of the International Symposium on*

Microarchitecture (MICRO), November 2008. Lake Como, Italy.

<https://doi.org/10.1109/MICRO.2008.4771782>

2. Mohit Tiwari, Hassan Wassel, Bitu Mazloom, Shashidhar Mysore, Frederic Chong, and Timothy Sherwood, "Complete Information Flow Tracking from the Gates Up," *Proceedings of the 14th International Conference on Architectural Support for Programming Languages and Operating Systems* (ASPLOS), March 2009. Washington, DC.
<https://doi.org/10.1145/1508244.1508258>
3. Mohit Tiwari, Shashidhar Mysore, Timothy Sherwood, "Quantifying the Potential for Program Analysis Peripherals," *Proceedings of the International Conference on Parallel Architecture and Compilation Techniques* (PACT), September 2009, Raleigh, NC (**Best Paper Award**).
<https://doi.org/10.1109/PACT.2009.38>
4. Mohit Tiwari, Xun Li, Hassan M G Wassel, Frederic T Chong, Timothy Sherwood, "Execution Leases: A Hardware-Supported Mechanism for Enforcing Strong Non-Interference," *Proceedings of the International Symposium on Microarchitecture* (MICRO), December 2009, New York, NY. <https://doi.org/10.1145/1669112.1669174>
5. Jason Oberg, Wei Hu, Ali Irturk, Mohit Tiwari, Timothy Sherwood and Ryan Kastner, "Theoretical Analysis of Gate Level Information Flow Tracking," *Proceedings of the 47th Design Automation Conference* (DAC), June 2010, Anaheim, CA.
<https://doi.org/10.1145/1837274.1837337>
6. Jonathan Valamehr, Mohit Tiwari, Timothy Sherwood, Ryan Kastner, Ted Huffmire, Cynthia Irvine, Timothy Levin, "Hardware Assistance for Trustworthy Systems through 3-D Integration," *Proceedings of the Annual Computer Security Applications Conference* (ACSAC), December 2010, Orlando, FL. <https://doi.org/10.1145/1920261.1920292>
7. Xun Li, Mohit Tiwari, Jason Oberg, Vineeth Kashyap, Frederic T Chong, Timothy Sherwood, and Ben Hardekopf, "Caisson: A Hardware Description Language for Secure Information Flow," *Proceedings of the ACM Conference on Programming Language Design and Implementation* (PLDI), June 2011, San Jose, CA.
<https://doi.org/10.1145/1993316.1993512>
8. Jason Oberg, Wei Hu, Ali Irturk, Mohit Tiwari, Timothy Sherwood, Ryan Kastner, "Information Flow Isolation in I2C and USB," *Proceedings of the 47th Design Automation Conference* (DAC), June 2011, San Diego, CA. <https://doi.org/10.1145/2024724.2024782>
9. Susmit Biswas, Mohit Tiwari, Luke Theogarajan, Timothy Sherwood, and Frederic T. Chong "Fighting Fire with Fire: Modeling the Data Center Scale Effects of Targeted Superlattice Thermal Management," *Proceedings of the International Symposium of Computer Architecture* (ISCA), June 2011, San Jose, CA.
<https://doi.org/10.1145/2024723.2000104>
10. Mohit Tiwari, Jason Oberg, Xun Li, Jonathan K Valamehr, Timothy Levin, Ben Hardekopf, Ryan Kastner, Frederic T Chong, Timothy Sherwood, "Crafting a Usable Microkernel, Processor, and I/O System with Strict and Provable Information Flow Security," *Proceedings*

of the International Symposium of Computer Architecture (ISCA), June 2011, San Jose, CA.
<http://doi.org/10.1145/2000064.2000087>

11. Martin Maas, Eric Love, Emil Stefanov, Mohit Tiwari, Elaine Shi, Krste Asanović, John Kubiawicz, Dawn Song, “PHANTOM: Practical Oblivious Computation in a Secure Processor”, *Proceedings of the ACM Conference on Computer and Communications Security (CCS)*, November 2013, Berlin, Germany. (NYU-CSAW Best Applied Security Paper of the Year, top-10.) <https://doi.org/10.1145/2508859.2516692>
12. Xun Li, Vineeth Kashyap, Jason Oberg, Mohit Tiwari, Vasanth Rajarathinam, Ryan Kastner, Timothy Sherwood, Ben Hardekopf, and Frederic Chong, “Sapper: A Language for Hardware-Level Security Policy Enforcement,” *Proceedings of the 14th International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS)*, March 2014, Salt Lake City, UT. (IEEE Micro Top Picks of the Year in Architecture, Honorable Mention.) <https://doi.org/10.1145/2644865.2541947>
13. Casen Hunger, Mikhail Kazdagli, Ankit Rawat, Alex Dimakis, Sriram Vishwanath, Mohit Tiwari, “Understanding Contention-driven Covert Channels and Using Them for Defense”, *Proceedings of the International Symposium on High Performance Computer Architecture (HPCA)*, February 2015, San Francisco, CA. <https://doi.org/10.1109/HPCA.2015.7056069>
14. Chang Liu, Austin Harris, Martin Maas, Michael Hicks, Mohit Tiwari, Elaine Shi, “GhostRider: A Hardware-Software System for Memory Trace Oblivious Computation,” *Proceedings of the 15th International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS)*, March 2015, Istanbul, Turkey. (Best Paper Award.) <https://doi.org/10.1145/2694344.2694385>
15. Ali Shafiee, Akhila Gundu, Manjunath Shevgoor, Rajeev Balasubramonian, Mohit Tiwari, “Avoiding Information Leakage in the Memory Controller with Fixed Service Policies,” *Proceedings of the 48th International Symposium on Microarchitecture (MICRO)*, December 2015, Waikiki, HI. <https://doi.org/10.1145/2830772.2830795>
16. Ashay Rane, Calvin Lin, Mohit Tiwari, “Raccoon: Closing Digital Side-Channels through Obfuscated Execution,” *Proceedings of the 24th USENIX Security Symposium*, August 2015, Washington, D.C. <https://www.usenix.org/node/190909>
17. Ashay Rane, Calvin Lin, Mohit Tiwari, “Secure, Precise, and Fast Floating-Point Operations on x86 Processors,” *Proceedings of the 25th Usenix Security Symposium*, August 2016, Austin, TX. <https://www.usenix.org/conference/usenixsecurity16/technical-sessions/presentation/rane>
18. Mikhail Kazdagli, Vijay Janapa Reddi, Mohit Tiwari, “Quantifying and Improving the Efficiency of Hardware-based Mobile Malware Detectors,” *Proceedings of the 49th International Symposium on Microarchitecture (MICRO)*, October 2016, Taipei, Taiwan. (Transitioned to Qualcomm Malware Research team, led to Qualcomm Faculty Award 2017.) <https://doi.org/10.1109/MICRO.2016.7783740>

19. Ali Shafiee, Rajeev Balasubramonian, Mohit Tiwari, Feifei Li, "Secure DIMM: Moving ORAM Primitives Closer to Memory," *Proceedings of International Symposium on High Performance Computer Architecture (HPCA)*, February 2018, Vienna, Austria.
<https://doi.org/10.1109/HPCA.2018.00044>
 20. Aydin Aysu, Michael Orshansky, Mohit Tiwari, "Binary Ring-LWE Hardware with Power Side-Channel Countermeasures," *Proceedings of Design Automation and Test in Europe (DATE)*, March 2018, Dresden, Germany. <https://doi.org/10.23919/DATE.2018.8342207>
 21. Casen Hunger, Lluís Vilanova*, Charalampos Papamanthou, Yoav Etsion, Mohit Tiwari, "DATS: Data Containers for Web Applications," *Proceedings of Architectural Support for Programming Languages and Operating Systems (ASPLOS)*, March 2018, Williamsburg, VA.
<https://doi.org/10.1145/3173162.3173213>
*Lluís Vilanova worked on this paper as a visitor in my lab in Fall 2014.
 22. Aydin Aysu, Youssef Tobah, Mohit Tiwari, Andreas Gerstlauer, Michael Orshansky, "Horizontal Side-Channel Vulnerabilities of Post-Quantum Key Exchange Protocols," *Proceedings of IEEE International Symposium on Hardware Oriented Security and Trust (HOST)*, May 2018, Washington DC, USA. (Best Paper Award, Runner-up.)
<http://spark.ece.utexas.edu/pubs/HOST-18-pqdpa.pdf>
- C. Other Major Publications
(*Technical Workshop Proceedings, Non-technical/education-related documents.*
Note: not all publications have DOI entries; please contact tiwari@austin.utexas.edu or visit <http://spark.ece.utexas.edu> to access the documents)
1. Ashish Sharma, Mohit Tiwari, Haitao Zheng, "Madmac: Building a Reconfigurable Radio Testbed using Commodity 802.11 Hardware," *IEEE Workshop on Networking Technologies for Software Defined Radio Networks*, September 2006, Reston, VA.
<https://doi.org/10.1109/SDR.2006.4286329>
 2. Xun Li, Mohit Tiwari, Ben Hardekopf, Timothy Sherwood, and Frederic Chong, "Secure Information Flow Analysis for Hardware Design: Using the Right Abstraction for the Job," *Proceedings of the Fifth ACM SIGPLAN Workshop on Programming Languages and Analysis for Security (PLAS)*, June 2010.
 3. Xun Li, Mohit Tiwari, Timothy Sherwood, Frederic Chong, "Function Flattening for Lease-Based, Information-Leak-Free Systems," *21st IEEE International Conference on Application-specific Systems, Architectures and Processors (ASAP Poster)*, July 2010, Rennes, France.
 4. Ted Huffmire, Timothy Levin, Michael Bilzor, Cynthia Irvine, Jonathan Valamehr, Mohit Tiwari, Timothy Sherwood, Ryan Kastner, "Hardware Trust Implications of 3-D Integration," *Workshop on Embedded Systems Security (WESS)* October 2010, Scottsdale, AZ.
 5. Hassan Wassel, Mohit Tiwari, Jonathan K. Valamehr, Luke Theogarajan, Jennifer Dionne, Frederic T. Chong, Timothy Sherwood, "Towards Chip-Scale Plasmonic Interconnects,"

Workshop on the Interaction between Nanophotonic Devices and Systems (WINDS), December 2010. Atlanta, GA.

6. Wei Hu, Jason Oberg, Ali Irturk, Mohit Tiwari, Timothy Sherwood, Dejun Mu, Ryan Kastner, "An Improved Encoding Technique for Gate Level Information Flow Tracking," *International Workshop on Logic and Synthesis (IWLS)*, June 2011.
7. Janet Kayfetz, Henning Schulzrinne, Timothy Sherwood, and Mohit Tiwari, "Your Desktop or Mine: Extending the Reach of Writing Instruction," *Ubiquitous Learning: An International Journal Volume 3, No 3.*, September 2011.
8. Mohit Tiwari, Prashanth Mohan, Andrew Osherooff, Hilfi Alkaff, Elaine Shi, Eric Love, Dawn Song, Krste Asanovic, "Context-centric Security," *Proceedings of the 7th USENIX Workshop on Hot Topics in Security (HotSec)*, August 2012, Bellevue, WA.
<https://www.usenix.org/conference/hotsec12/workshop-program/presentation/tiwari>
9. Martin Maas, Eric Love, Emil Stefanov, Mohit Tiwari, Elaine Shi, Krste Asanovic, John Kubiawicz, Dawn Song, "A High-Performance Oblivious RAM Controller on the Convey HC-2ex Heterogeneous Computing Platform," *Workshop on the Intersections of Computer Architecture and Reconfigurable Logic (CARL)*, December 2013, Davis, CA.
10. *Mikhail Kazdagli*, Ling Huang, Vijay Reddi, Mohit Tiwari, "Morpheus: Benchmarking Computational Diversity in Mobile Malware". *Workshop on Hardware and Architectural Support for Security and Privacy (HASP)*, June 2014, Minneapolis, MN. (held in conjunction with ISCA).
11. Akhila Gundu, Gita Sreekumar, Ali Shafiee, Seth Pugsley, *Hardik Jain*, Rajeev Balasubramonian, Mohit Tiwari, "Memory Bandwidth Reservation in the Cloud to Avoid Information Leakage in the Memory Controller". *Workshop on Hardware and Architectural Support for Security and Privacy (HASP)*, June 2014, Minneapolis, MN. (held in conjunction with ISCA).

ORAL PRESENTATIONS (oral presentations in rank are shown in bold):

1. Mohit Tiwari, "A Small Cache of Large Ranges: Hardware Methods for Efficiently Searching, Storing, and Updating Big Dataflow Tags", MICRO, November 2008, Lake Como, Italy.
2. Mohit Tiwari, "Complete Information Flow Tracking from the Gates Up", ASPLOS, March 2009, Washington D.C., USA.
3. Mohit Tiwari, "Complete Information Flow Tracking from the Gates Up", August 2009, Naval Postgraduate School, Monterey, USA. (**Invited talk**)
4. Mohit Tiwari, "Quantifying the Potential for Program Analysis Peripherals", PACT, September 2009, Raleigh, NC, USA.
5. Mohit Tiwari, "Execution Leases: A Hardware-Supported Mechanism for Enforcing Strong Non-Interference", MICRO, December 2009, New York, USA.

6. Mohit Tiwari, "Crafting a Usable Microkernel, Processor, and I/O System with Strict and Provable Information Flow Security", ISCA, June 2011, San Jose, CA, USA.
7. Mohit Tiwari, "Context-centric Security", HotSec, August 2012. Bellevue, WA, USA.
8. Mohit Tiwari, "Practical Oblivious Computation in a Secure Processor", UT Austin Computer Science Systems Seminar, September 2013, Austin, TX, USA. (Invited talk)
9. Mohit Tiwari, "Practical Oblivious Computation in a Secure Processor", UMD CS Seminar, September 2013, College Park, MD, USA. (Invited talk)
10. Mohit Tiwari, "Hardware support for systems security", UT Austin Programming Languages Lunch, April 2014, Austin, TX, USA.
11. Mohit Tiwari, "Protecting User Data from Breaches", Seton and Dell Children's Hospital, May 2015, Austin, TX, USA. (invited talk)
12. Mohit Tiwari, "Data Security Beyond Encryption and HIPAA Regulations", Exponential Kansas City, September 2015, Kansas City, MO, USA. (invited talk)
13. Mohit Tiwari, "Securing Data in Use: Faster Innovation, Better Security", HIMSS Privacy and Security Forum, November 2015, Boston, MA, USA. (invited talk)
14. Mohit Tiwari, "Cybersecurity for Embedded Systems", Lockheed Martin Aerospace group, November 2015, Austin, TX, USA.
15. Mohit Tiwari, Christine Julien, "Context-centric Security", Laboratory for Telecommunication Sciences, January 2016, College Park, MD, USA. (invited talk)
16. Mohit Tiwari, Michael Orshansky, Andreas Gerstlauer, "Cybersecurity for Embedded Systems", UT Austin and Lockheed Martin Aerospace and Missile Systems, April 2016, Austin, TX, USA.
17. Mohit Tiwari, "Towards Trustworthy and Robust Behavioral Malware Detectors", Center for Future Architectures e-Workshop, April 2016.
18. Mohit Tiwari, "Data Security Beyond Encryption and HIPAA Regulations", HIMSS Privacy and Security Forum, May 2016, Los Angeles, CA, USA. (invited talk)
19. Mohit Tiwari, "Future-proofing IoT Security", ACM/IEEE Workshop on Internet of Things at Design Automation Conference (DAC), June 2016, Austin, TX, USA. (invited talk)
20. Mohit Tiwari, "Software-defined Defenses against Hardware Side-channels" in Workshop titled "Who is the major threat to tomorrow's security? You, the hardware designer", June 2016, Austin, TX, USA. (invited talk)
21. Mohit Tiwari, "Future-proofing IoT Security", at ARM Research, July 2016, Austin, TX, USA.

(invited talk)

22. Mohit Tiwari, “Software-defined Hardware Security”, Keynote at Workshop on Computer-Aided Design and Implementation for Cryptography and Security (CADICS), November 2016, Austin, TX, USA. (invited talk)
22. Mohit Tiwari, “Systems Security Research in the Spark Lab at UT Austin”, UT Austin and General Dynamics Meeting, January 2017, Austin, TX, USA.
23. Mohit Tiwari, “Software-defined Security Against Low-level Attacks”, National Institute of Standards and Technology (NIST), February 2017, Gaithersburg, MD, USA. (invited talk)
24. Mohit Tiwari, “Software-defined Hardware Security”, Texas A&M University ECE Seminar, March 2017, College Station, TX, USA. (invited talk)
25. Mohit Tiwari, “Composable Primitives for Systems Security”, Thirteenth International Summer School on Advanced Computer Architecture and Compilation for High-Performance and Embedded Systems (ACACES), 9-15 July 2017, Fiuggi, Italy. (invited instructor)
26. Mohit Tiwari, Michael Orshansky, Andreas Gerstlauer, “Power Modeling for Cybersecurity”, UT Austin and Lockheed Martin Annual Review, September 2017, Austin, TX, USA.
27. Mohit Tiwari, “Data-centric Secure Systems”, Visa Research, October 2017, Palo Alto, CA, USA. (invited talk)
28. Mohit Tiwari, Michael Orshansky, Andreas Gerstlauer, “Power Modeling for Cybersecurity”, Lockheed Martin MFC Office, January 2018, Dallas, TX, USA.
29. Mohit Tiwari, “Software-defined Hardware Security”, CS Department and Huawei Systems Lab, UT Austin, March 2018, Austin, TX, USA. (invited talk)
30. Mohit Tiwari, “Mobile Data Containers”, UT Austin and General Dynamics Meeting, March 2018, Austin, TX, USA.
31. Mohit Tiwari, “Side- and Covert-Channels: Notes on Research Lifecycle”, Plenary Talk at National Science Foundation Workshop on Side- and Covert-Channel Security, March 2018, Washington D.C., USA. (invited talk)
32. Mohit Tiwari, “A Security Plane for Enterprise Systems”, UT Austin and General Dynamics meeting, April 2018, Austin, TX, USA.
33. Mohit Tiwari, “A Security Plane for Enterprise Systems”, CS Department, Arizona State University, May 2018, Tempe, AZ, USA. (invited talk)
34. Mohit Tiwari, Todd Austin, Valeria Bertacco, Sharad Malik, “Ensembles of Moving Target Defenses”, GOMACTEC, March 2019, Albuquerque, NM.
35. Mohit Tiwari, “Mobile Data Containers”, Dynamic Connections, General Dynamics Annual

Conference, Denver, CO, 2019

36. Mohit Tiwari, “A Security Plane for Enterprise Systems”, Dynamic Connections, General Dynamics Annual Conference, April 2019, Denver, CO.
37. Mohit Tiwari, “Oblivious Processing for Hardware Security”, Anti-Tamper Conference, April 2019, Baltimore, MD.
38. Mohit Tiwari, “Security Primitives for Enterprise Systems”, ARM Research Seminar, April 2019, Austin, TX

POSTDOC COMPLETED:

Aydin Aysu (08/22/2016—6/29/2018). Starting as tenure-track Assistant Professor in ECE Department, North Carolina State University (NCSU) from Fall 2018.

VITA: Mohit Tiwari received a Bachelor of Technology degree in Computer Science and Engineering from the Indian Institute of Technology, Guwahati in 2005, and the MS and Ph.D. degrees in Computer Science from the University of California at Santa Barbara (UCSB) in 2010 and 2011, respectively. His research at UCSB received the Outstanding Dissertation Award and has subsequently been commercialized by his mentees through an NSF-funded corporation (Tortuga Logic). He then won the NSF Computing Innovation Fellowship (2011 – 2013) to work as a post-doctoral scholar with Prof. Krste Asanovic and Prof. Dawn Song at University of California, Berkeley. Mohit Tiwari joined the faculty of UT Austin ECE in August 2013 as an assistant professor where he currently is a Fellow of the AMD Chair. His research focuses on computer architectures and systems for cybersecurity and privacy. His research awards include the Qualcomm Faculty Award, the National Science Foundation CAREER award, Best Paper Awards at ASPLOS’15, PACT’09, and (runner-up at) HOST’18, IEEE Micro Top Picks of year in computer architecture (2010, 2015 Honorable Mention), and the CSAW top-10 Best Applied-security Paper in Cybersecurity in 2013, while his undergraduate research students have received the Marjorie Morales and NSF/SRC awards for excellence in research.