

1. Name

Yong Wang
Associate Professor
Beacom College of Computer and Cyber Sciences
Dakota State University

2. Education

2007	Ph.D. (CS)	University of Nebraska, Lincoln, NE.
<i>Dissertation: Key Management Protocols in Hybrid Wireless Sensor Networks.</i>		
<i>Advisor: Prof. Byrav Ramamurthy.</i>		
1998	M.Eng. (CS)	Wuhan University, Wuhan, P.R. China.
1995	B.Sc. (CS)	Wuhan University, Wuhan, P.R. China.

3. Academic Experience

2017 – Present	Associate Professor	Dakota State University, Madison, SD.
2012 – 2017	Assistant Professor	Dakota State University, Madison, SD.

4. Non-academic Experience

2007 – 2011	Senior software engr./Manger	Calient Networks, Santa Barbara, CA.
2002 – 2003	Senior software engineer	UTStarcom R&D Center, Shenzhen, China.
1998 – 2000	Senior software engineer	ZTE, Shenzhen, China.

5. Certifications or Professional Registrations

- Collaborative Institutional Training Initiative (CITI) Program for IRB members
- Core Impact CICP Certified Professional

6. Current Memberships in Professional Organizations

- Member, Institute of Electrical and Electronics Engineers (IEEE)
- Member, IEEE Communications Society (IEEE ComSoc)

7. Honors and Awards

Awards

2015 Merrill Hunter Award for Excellence in Research at Dakota State University.
2007 Outstanding graduate teaching assistant awarded by the Department of Computer Science and Engineering, University of Nebraska-Lincoln.
2003-2007 Full scholarships for doctoral study at University of Nebraska-Lincoln.
1997 Outstanding graduate student scholarship awarded by the Wuhan University.
1994 Outstanding undergraduate research student awarded by the Student Affairs, Wuhan University.

1992 Outstanding undergraduate student scholarship awarded by the Wuhan University.

Funding Records

- a. “Practical Secure Smartphones: Techniques, Tools, and Applications”, DSU Doctoral Summer Seed Grant, \$10,000, June 2012 – August 2013. **Yong Wang (PI)**.
- b. “Acquisition of Equipment to Establish MobiSec Lab for Research and Education at DSU”, South Dakota Performance Improvement Fund, \$79,950.00, August 2012 – May 2013; **Yong Wang (PI)**.
- c. “MRI: Acquisition of an Online Banking System for Information Assurance Research”, NSF CNS1123220, \$400,000, September 2013 – August 2014. **Yong Wang (PI)**, Dianxiang Xu (Former PI), Joshua Pauli, Manghui Tu.
- d. "RET Site in Cyber Security", NSF CNS 1200648, \$500,000.00, May 1, 2012 - April 30, 2015. **Yong Wang (PI)**, Dianxiang Xu (Former PI), and Patrick Engebretson.
- e. “MRI: Acquisition of Equipment to Establish Mobile Testing Infrastructure for Bring Your Own Device Research and Education”, NSF CNS 1337529, \$168,076.00, September 1, 2013 – August 31, 2016. **Yong Wang (PI)**.
- f. “Privacy Impact Assessment in Social Networks”, DSU FRI Grant, \$2000.00, September 2013 – May 2014; **Yong Wang (PI)**.
- g. “Establish Data Center Technology Lab at DSU for Cloud and Big Data Security”, South Dakota Performance Improvement Fund, \$90,000.00, Aug 2014 – May 2015; **Yong Wang (PI)**.
- h. “Understanding the Relationship between MySanfordChart and the Utilization of Emergency Department and urgent Care Centers”, Sanford Data Collaboration, \$1,000, September 2016 - August 2017; **Yong Wang (PI)**.
- i. “CyberTraining: CIP: North Central Region Cyber Training Center for Cybersecurity at Dakota State University”, NSF OAC 1730105, \$479,658, September 1, 2017 - August 31, 2020. Wayne Pauli (PI), **Yong Wang (Co-PI)**.
- j. “REU Site in IoT Security”, NSF, \$359,488, March 1, 2019 – February 28, 2022. **Yong Wang (PI)**, Ashley Podhradsky (Co-PI). (*pending*).

8. Service Activities

- University service
 - DSU Institutional Review Board, Fall 2018-Present
 - DSU Faculty Award Selection Committee, Spring 2016-Present
 - DSU Graduate Council, Fall 2013-Present
 - DSU Research Committee, Fall 2013-Present
 - DSU MSIA Graduate Student Application Committee, Fall 2012-Present
 - DSU MSACS Graduate Student Application Committee, Fall 2013-Present
 - SDBOR System Intellectual property Council, 2015-Present
- External service
 - Co-chair, Cybersecurity and big data working group, Middle West Big Data Hub
 - TPC members and reviewers for many international conferences and journals in computer science
 - Dissertation examiners for Murdoch University, Australia

9. Selected Publications

- B1. Sandeep Kumar Lakkaraju, Dianxiang Xu, and **Yong Wang**, A Contextual Model to Integrate Healthcare Workflows and Access Control Policies (010917-120853), *Book chapter in Handbook of Research on Emerging Perspectives on Healthcare Information Systems and Informatics*, IGI Global, 2018.
- B2. **Yong Wang** and Jason Nikolai, Key Management in CPS, *Book chapter in Security and Privacy in Cyber-Physical Systems: Foundations and Applications (Hongbing, Song, Glenn A. Fink, Gilad L. Rosner, Sabina Jeschke)*, published by Wiley Co., November 2017.
- J3. Sulabh Bhattarai and **Yong Wang**, End-to-End Trust and Security for Internet of Things Applications, *IEEE Computer*, April 2018.
- J4. Sandeep Lakkaraju, Dianxiang Xu, **Yong Wang**, Analysis of Healthcare Workflows in Accordance with Access Control Policies, the *International Journal of Healthcare Information Systems and Informatics (IJHISI)*, 11(1)1-20, 2016.
- C5. **Yong Wang**, CS4A: A New Approach for Cybersecurity Workforce Development, *New Approaches to Cybersecurity Education (NACE) Workshop*, New Orleans, Louisiana, June 9-10, 2018.
- C6. Keith Jones and **Yong Wang**, An Optimized Running Window Entropy Algorithm, *the National Cyber Summit*, Huntsville, AL, June 5-7, 2018.
- C7. Jeremias Eppler and **Yong Wang**, Towards Improving the Security of Mobile Systems using Virtualization and Isolation, *Fourth Conference on Mobile and Secure Services*, Miami, Florida, February 24-25, 2018.
- C8. Tareq Allan and **Yong Wang**, The Demand for Technical Safeguards in the Healthcare Sector: a Historical Perspective Enlightens Deliberations about the Future, *2017 Americas Conference on Information Systems*, Boston, MA, 2017.
- C9. Ali Ahmed, Tareq Nasrallah, **Yong Wang**, etc., Impact of E-Visits on Emergency Departments and Urgent Care Centers, *2017 Americas Conference on Information Systems*, Boston, MA, 2017.
- C10. Jason Nikolai and **Yong Wang**, A System for Detecting Malicious Insider Data Theft in IaaS Cloud Environments, *IEEE Globecom*, Washington, DC, USA, December 4-8, 2016.
- C11. **Yong Wang** and Jun Liu, An Attribute-based Statistic Model for Privacy Impact Assessment, *the 2016 International Conference on Collaboration Technologies and Systems (CTS 2016)*, Orlando, Florida, USA, Oct 31-Nov 4, 2016.
- C12. Jason Nikolai and **Yong Wang**, A Streaming Intrusion Monitoring and Classification System for IaaS Cloud, *IEEE Cloud*, San Francisco, CA, USA, June 27-July 2, 2016.
- C13. **Yong Wang**, Christen Hahn, and Kruttika Sutrave, Mobile Payment Security, Threats, and Challenges, *Second Conference on Mobile and Secure Services*, Gainesville, Florida, February 26-27, 2016.
- C14. Raj Kumar Nepali and **Yong Wang**, You Look Suspicious!!: Leveraging visible attributes to classify malicious short URLs on Twitter, *Hawaii International Conference on System Sciences (HICSS-49)*, Kauai, Hawaii, January 5-8, 2016.
- C15. Yazan Alshboul, **Yong Wang**, and Raj Kumar Nepali, Big Data Life Cycle: Threats and Security Model, *2015 Americas Conference on Information Systems*, Puerto Rico, 2015.

- C16. Raj Kumar Nepali, **Yong Wang**, and Yazan Alshboul, Detecting Malicious Short URLs on Twitter, *2015 Americas Conference on Information Systems*, Puerto Rico, 2015.
- C17. **Yong Wang**, and Raj Nepali, Privacy Impact Assessment for Online Social Networks, *the 2015 International Conference on Collaboration Technologies and Systems (CTS 2015)*, Atlanta, Georgia, USA, June 1-5, 2015.
- C18. **Yong Wang**, and Raj Nepali, Privacy Threat Modeling Framework for Online Social Networks, *the 2015 International Conference on Collaboration Technologies and Systems (CTS 2015)*, Atlanta, Georgia, USA, June 1-5, 2015.
- C19. **Yong Wang** and Yazan Alshboul, Mobile Security Testing Approaches and Challenges, *First Conference on Mobile and Secure Services*, Gainesville, Florida, February 19-21, 2015.
- C20. **Yong Wang**, An Automated Virtual Security Testing Platform for Android Mobile Apps, *First Conference on Mobile and Secure Services*, Gainesville, Florida, February 19-21, 2015.
- C21. Santiago Gimenez Ocano, Byrav Ramamurthy and **Yong Wang**, Remote Mobile Screen (RMS): An Approach for Secure BYOD Environments, *2015 International Conference on Computing, Networking and Communication (ICNC)*, Anaheim, California, USA, February 16-19, 2015.
- C22. Raj Nepali and **Yong Wang**. SocBridge: Bridging the gap between Online Social Networks, *Twentieth Americas Conference on Information Systems*, Savannah, Georgia, 2014.
- C23. Jason Nikolai, **Yong Wang**, and Raj Nepali, A Framework for Examining the Human Side of Anti-Forensic Measures, *Twentieth Americas Conference on Information Systems*, Savannah, Georgia, 2014.
- C24. **Yong Wang**, Karthik Vangury, and Jason Nikolai, MobileGuardian: A Security Policy Enforcement Framework for Mobile Devices, *the 2014 International Conference on Collaboration Technologies and Systems (CTS 2014)*, Minneapolis, Minnesota, USA, May 19-23, 2014.
- C25. Nicholas Penning, Michael Hoffman, Jason Nikolai, and **Yong Wang**, Mobile Malware Security Challenges and Cloud-Based Detection, *the 2014 International Conference on Collaboration Technologies and Systems (CTS 2014)*, Minneapolis, Minnesota, USA, May 19-23, 2014.
- C26. Jason Nikola and **Yong Wang**, Hypervisor-based Cloud Intrusion Detection System, *2014 International Conference on Computing, Networking and Communication (ICNC), CNC Workshop*, Honolulu, Hawaii, USA, Feb 3-6, 2014.
- C27. **Yong Wang**, Raj K Nepali, and Jason Nikolai, Social Network Privacy Measurement and Simulation, *2014 International Conference on Computing, Networking and Communication (ICNC), CNC Workshop*, Honolulu, Hawaii, USA, Feb 3-6, 2014.
- C28. **Yong Wang**, Jinpeng Wei, and Karthik Vangury, Bring Your Own Device Security Issues and Challenges, *The 11th Annual IEEE Consumer Communications & Networking Conference*, Las Vegas, Nevada USA, Jan 10-13, 2014.

10. Recent Professional Development Activities

- *Air Force 2030 Initiative*, College station, Texas, June 28-29, 2018.

- *New Approaches to Cybersecurity Education (NACE) Workshop*, New Orleans, Louisiana, June 9-10, 2018.
- *Midwest Big Data Hub all-hands meeting*, Omaha, Nebraska, October 2-3, 2017.
- *National Initiative for Cybersecurity Education (NICE) Conference*, Dayton, Ohio, November 7-8, 2017.