

# Xing Gao

## Research Interest

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Security; Cloud Computing; Mobile Computing.

## Education

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<b>College of William and Mary</b> <i>Ph.D., Computer Science</i>	<b>Williamsburg, VA, USA</b> 2012-2018
<b>Beijing Institute of Technology,</b> <i>B.A., Information Engineering</i>	<b>Beijing, China</b> 2007-2011

## Professional Experiences

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<b>The University of Delaware</b> <i>Assistant Professor</i>	<b>Newark, DE, USA</b> 8/2020-present
<b>The University of Memphis</b> <i>Assistant Professor</i>	<b>Memphis, TN, USA</b> 8/2018-8/2020
<b>IBM TJ Watson Research Center</b> <b>USA</b> <i>Research Intern</i>	<b>Yorktown Heights, NY,</b> USA 5/2016-9/2016

## Publications

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### Conference Publications:

- “Charger-Surfing: Exploiting a Power Line Side-Channel for Smartphone Information Leakage”, Patrick Cronin, **Xing Gao**, Chengmo Yang, and Haining Wang, **[Security’21]** *USENIX Security Symposium*, Vancouver, BC, Canada. August, 2021.
- “Evade Deep Image Retrieval by Stashing Private Images in the Hash Space”, Yanru Xiao, Cong Wang, and **Xing Gao**, **[CVPR’20]** *IEEE Conference on Computer Vision and Pattern Recognition*, Seattle, WA, June 2020.
- “Houdini’s Escape: Breaking the Resource Rein of Linux Control Groups”, **Xing Gao**, Zhongshu Gu, Zhengfa Li, Hani Jamjoom, and Cong Wang, **[CCS’19]** *ACM Conference on Computer and Communications Security*, London, UK, November 2019.
- “Close the Gap between Deep Learning and Mobile Intelligence by Incorporating Training in the Loop”, Cong Wang, Yanru Xiao, **Xing Gao**, Li Li, and Jun Wang, **[MM’19]** *ACM International Conference on Multimedia*, Nice, France, October 2019. **(Oral: 9.9%)**

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- “Reduced Cooling Redundancy: A New Security Vulnerability in a Hot Data Center”,  
**Xing Gao**, Zhang Xu, Haining Wang, Li Li, and Xiaorui Wang,  
**[NDSS’18]** *ISOC Network and Distributed System Security Symposium*, San Diego, CA, February, 2018.
  - “ContainerLeaks: Emerging Security Threats of Information Leakages in Container Clouds”,  
**Xing Gao**, Zhongshu Gu, Mehmet Kayaalp, Dimitrios Pendarakis, and Haining Wang,  
**[DSN’17]** *IEEE/IFIP International Conference on Dependable Systems and Networks*, Denver, CO, June, 2017.
  - “Detecting Passive Cheats in Online Games via Performance-Skillfulness Inconsistency”,  
Daiping Liu, **Xing Gao**, Mingwei Zhang, and Haining Wang,  
**[DSN’17]** *IEEE/IFIP International Conference on Dependable Systems and Networks*, Denver, CO, June, 2017.
  - “E-Android: A New Energy Profiling Tool for Smartphones”,  
**Xing Gao**, Dachuan Liu, Daiping Liu, Haining Wang, and Angelos Stavrou,  
**[ICDCS’17]** *IEEE International Conference on Distributed Computing*, Atlanta, GA, June, 2017.
  - “PmDroid: Permission Supervision for Android Advertising”,  
**Xing Gao**, Dachuan Liu, Haining Wang, and Kun Sun,  
**[SRDS’15]** *IEEE Symposium on Reliable Distributed Systems*, Montreal, Quebec, Canada, September 2015.
  - “Exploiting Eye Tracking for Smartphone Authentication”,  
Dachuan Liu, Bo Dong, **Xing Gao**, and Haining Wang,  
**[ACNS’15]** *International Conference on Applied Cryptography and Network Security*, New York, NY, June 2015.

### **Journal Publications:**

- “Investigating Security Vulnerabilities in a Hot Data Center with Reduced Cooling Redundancy”,  
**Xing Gao**, Guannan Liu, Zhang Xu, Haining Wang, Li Li, and Xiaorui Wang.  
**[TDSC]** *IEEE Transactions on Dependable and Secure Computing*, 2020.
- “Understanding the Security Implication of Aborting Virtual Machine Live Migration”,  
**Xing Gao**, Jidong Xiao, Haining Wang, and Angelos Stavrou.  
**[TCC]** *IEEE Transactions on Cloud Computing*, 2020.
- “DoS Vulnerabilities and Mitigation Strategies in Software-Defined Networks”,  
Shuhua Deng, **Xing Gao**, Zebin Lu, Zhengfa Li, and Xieping Gao,  
**[JNCA]** *Journal of Network and Computer Applications*, 2019.
- “A Study on the Security Implications of Information Leakages in Container Clouds”,  
**Xing Gao**, Benjamin Steenkamer, Zhongshu Gu, Mehmet Kayaalp, Dimitrios Pendarakis, and Haining Wang,  
**[TDSC]** *IEEE Transactions on Dependable and Secure Computing*, 2018.
- “Packet Injection Attack and Its Defense in Software-Defined Networks”,  
Shuhua Deng, **Xing Gao**, Zebin Lu, and Xieping Gao,  
**[TIFS]** *IEEE Transactions on Information Forensics & Security*, 2017.

### **Poster/Other Publications:**

- “A Study of the Multiple Sign-in Feature in Web Applications” (short paper),  
Marwan Albahar, **Xing Gao**, Gaby Dagher, Daiping Liu, Fengwei Zhang, and Jidong Xiao,

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**[SecureComm'19]** *EAI International Conference on Security and Privacy in Communication Networks*, Orlando, FL, October 2019.

○ “Location Privacy Breach: Apps Are Watching You in Background” (short paper),  
Dachuan Liu, **Xing Gao**, and Haining Wang,

**[ICDCS'17]** *IEEE International Conference on Distributed Computing*, Atlanta, GA, June, 2017.

○ “Why “Some” Like It Hot Too: Thermal Attack on Data Centers” (poster),

**Xing Gao**, Zhang Xu, Haining Wang, Li Li, and Xiaorui Wang,

**[SIGMETRICS'17]** *ACM SIGMETRICS International Conference on Measurement and Modeling of Computer Science*, Urbana-Champaign, IL, June 2017.

○ “COMS: Customer Oriented Migration Service” (short paper),

Kai Huang, **Xing Gao**, Fengwei Zhang, and Jidong Xiao,

**[CLOUD'17]** *IEEE International Conference on Cloud Computing*, Honolulu, Hawaii, June, 2017

○ “Shoot for the Moon and You Will Never Miss: Characterizing and Detecting Aimbots in Online Games”, (poster)  
Daiping Liu, **Xing Gao**, Mingwei Zhang, and Haining Wang,

**[SIGMETRICS'16]** *ACM SIGMETRICS International Conference on Measurement and Modeling of Computer Science*, Antibes Juan-les-Pins, June 2016.

○ “On Energy Security of Smartphones” (poster),

**Xing Gao**, Dachuan Liu, Daiping Liu, and Haining Wang,

**[CODASPY'16]** *ACM Conference on Data and Application Security and Privacy*, New Orleans, LA, March 2016.

○ “TwinHype: A Novel Approach to Reduce Cloud Downtime” (poster),

Lei Lu, **Xing Gao**, and Jidong Xiao,

**[NDSS'16]** *ISOC Network and Distributed System Security Symposium*, San Diego, CA, March 2016.

## Teaching

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- CISC449/649 Topics in Computer Applications - Internet Security with Mobile and IoT Devices – Fall 2020
- COMP3825 Networking and Information Assurance – Fall 2018, 2019
- COMP7/8327 Network and Internet Security – Spring 2019
- COMP7311/8311 - Advanced Computer Networks – Spring 2020

## Awards and Certificates

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- Seed 2019 Summer Workshop on Hands-on Labs for Security Education.
- Distinguished Poster Award, NDSS, 2016.

## Professional Services

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- **TPC Member:** NSS'20, ICICS'19, 20, IEEE WoWMoM'19, IWCCS'19, 20.
- **Journal Reviewer:** Transactions on Networking, Transactions on Cloud Computing, Transactions on Parallel and Distributed Systems, Transactions on Sensor Network, IEEE Internet of Things Journal.
- **Reviewer:** The Ralph E. Powe Junior Faculty Award at ORAU.
- **Department Service:** Undergraduate Committee Member, Faculty Search Committee Member.