**Paper List and Assignments (435/579) – Fall 2019**

**Midterm Paper Submission Strategy**

**Students present before 11/06/2019, including 11/06/2019**

* **Submit the term paper in the last day of class (12/11/2019)**
* **Less time to prepare the presentation and longer time to write the term paper.**

**Students present after 11/06/2019**

* **Submit the term paper on mid-term day (11/06/2019)**
* **Longer time to prepare the presentation and less time to write the term paper.**

**Submitting Term Papers & Presentation Slides**

**File name convention (.pdf format): (Presentation/Term Paper) research paper title/term paper title + student first name + student last name**

***For example:***

*(Presentation) Mobicom2015\_Last-Mile Navigation Using Smartphones – Jane Austen.ppt and pdf*

(please submit both ppt and pdf files)

*(Term Paper) Mobicom2015\_Last-Mile Navigation Using Smartphones – Jane Austen.pdf*

**Important Notices:  
1. The date of presentation may be changed according to the class time.  
2. Please submit your slides as an assignment after your presentation based on in-class comments. Your slides will be posted in the class website  
3. Please submit your term paper (for mid-term) as an assignment, and also bring a printed copy of your term paper to the class on the due day.**

**Presentation time: 20 minutes total – 18 minutes presentation, 2 minutes for questions**

**09/04/2019   
Regular lecture**

**09/11/2019  
Regular lecture**

**09/18/2019**

Pierson Timothy J., Travis Peters, Ronald Peterson, and David Kotz. "Proximity Detection with Single-Antenna IoT Devices." *ACM MobiCom* 2019.

Leonardo Luna, Kumar Anvitha Selva

Kang Soowon, Hyeonwoo Choi, Sooyoung Park, Chunjong Park, Jemin Lee, Uichin Lee, and Sung-Ju Lee. "Fire in Your Hands: Understanding Thermal Behavior of Smartphones." *ACM MobiCom 2019.*

Song Yang, Xin Yang

**09/25/2019**

Zhang, Hanbin, Chen Song, Aosen Wang, Chenhan Xu, Dongmei Li, and Wenyao Xu. "PDVocal: Towards Privacy-preserving Parkinson’s Disease Detection using Non-speech Body Sounds." *ACM MobiCom*, 2019.

Sri Sai Krishna Tottempudi, Darius Baboomian

Shen Sheng, He Wang, and Romit Roy Choudhury. "I am a smartwatch and I can track my user's arm." *ACM MobiSys 2016*.

Bin Hu, Zhenzhe Lin

**10/02/2019**

Papernot, Nicolas, Patrick McDaniel, Ian Goodfellow, Somesh Jha, Z. Berkay Celik, and Ananthram Swami. "Practical black-box attacks against machine learning." *ACM AsiaCCS* 2017.

Haole Wang, Mengmei Ye

Qin Yao, Nicholas Carlini, Ian Goodfellow, Garrison Cottrell, and Colin Raffel. "Imperceptible, robust, and targeted adversarial examples for automatic speech recognition." *arXiv preprint.*

Feiyao Li, Dakota Rosell

**10/09/2019**

Ford Nic, Justin Gilmer, Nicolas Carlini, and Dogus Cubuk. "Adversarial examples are a natural consequence of test error in noise." *arXiv preprint.*

Miao Yin, Qiyang Zhou

Athalye Anish, Nicholas Carlini, and David Wagner. "Obfuscated gradients give a false sense of security: Circumventing defenses to adversarial examples." *arXiv preprint.*

Muhammad Aunns Shabbir, Donglin Gao

**10/16/2019**

Wang, Fei, Stanislav Panev, Ziyi Dai, Jinsong Han, and Dong Huang. "Can WiFi Estimate Person Pose?." *arXiv preprint.*

Sifan Yuan, Imad-Uddin Siddiqui

Anand S. Abhishek, and Nitesh Saxena. "Speechless: Analyzing the threat to speech privacy from smartphone motion sensors." *IEEE S&P* 2018.

Miaomiao Xie, Ziheng Wang

**10/23/2019   
Traveling, quiz 1, no lectures.**

**10/30/2019**

Zhang Guoming, Chen Yan, Xiaoyu Ji, Tianchen Zhang, Taimin Zhang, and Wenyuan Xu. "Dolphinattack: Inaudible voice commands." *ACM CCS* 2017.

Avin Abraham, Taras Tysovskyi

Wang Qian, Kui Ren, Man Zhou, Tao Lei, Dimitrios Koutsonikolas, and Lu Su. "Messages behind the sound: real-time hidden acoustic signal capture with smartphones."  *ACM MobiCom* 2016.

David Santiago, Srikrishnaraja Mahadas

**11/06/2019 (Midterm paper submission)**

Mao Wenguang, Mei Wang, and Lili Qiu. "Aim: acoustic imaging on a mobile." *ACM MobiSys* 2018.

Mingju Liu, Mingming Pei

Zhou Man, Qian Wang, Jingxiao Yang, Qi Li, Feng Xiao, Zhibo Wang, and Xiaofen Chen."Patternlistener: Cracking android pattern lock using acoustic signals." *ACM CCS* 2018.

Atul Srivastava, Zhuoran Liu

**11/13/2019**

**Traveling, quiz 2, no lectures.**

**11/20/2019**

Blue Logan, Hadi Abdullah, Luis Vargas, and Patrick Traynor. "2ma: Verifying voice commands via two microphone authentication." *ACM AsiaCCS* 2018.

Peng Xu, Muhammad Ahsan Sami

Yu Hyunwoo, Jaemin Lim, Kiyeon Kim, and Suk-Bok Lee. "Pinto: Enabling Video Privacy for Commodity IoT Cameras." *ACM CCS* 2018.

Yuxiang Song, Brett Dougherty

Chun-Yu (Daniel) Chen, Bo-Yao Lin, Junding Wang, and Kang G. Shin. “Keep Others from Peeking at Your Mobile Device Screen!” *ACM MobiCom* 2019.

Boyang Zhang, Xinyi Yang

**11/27/2019**

**No class. Friday schedule.**

**12/04/2019**

Yuan Xuejing, Yuxuan Chen, Yue Zhao, Yunhui Long, Xiaokang Liu, Kai Chen, Shengzhi Zhang, Heqing Huang, XiaoFeng Wang, and Carl A. Gunter. "Commandersong: A systematic approach for practical adversarial voice recognition." *USENIX Security* 2018.

Jain Sanyam Jain, Tu Xu

Liu Jian, Cong Shi, Yingying Chen, Hongbo Liu, and Marco Gruteser. "CardioCam: Leveraging Camera on Mobile Devices to Verify Users While Their Heart is Pumping." *ACM MobiSys 2019*.

David Wang, Chang Sun

Li Zhengxiong, Aditya Singh Rathore, Chen Song, Sheng Wei, Yanzhi Wang, and Wenyao Xu. "PrinTracker: fingerprinting 3D printers using commodity scanners." *ACM CCS* 2018.

Paul Stanik, Haocong Wang

**12/11/2019**

Reynolds Joshua, Trevor Smith, Ken Reese, Luke Dickinson, Scott Ruoti, and Kent Seamons. "A Tale of Two Studies: The Best and Worst of YubiKey Usability." *IEEE S&P* 2018.

Linzhang Wu, Jin Xu

Carlini Nicholas, Pratyush Mishra, Tavish Vaidya, Yuankai Zhang, Micah Sherr, Clay Shields, David Wagner, and Wenchao Zhou. "Hidden voice commands." *USENIX Security* 2016.

Harman Kailey, Dazhi Li

Zhou Bing, Jay Lohokare, Ruipeng Gao, and Fan Ye. "EchoPrint: Two-factor Authentication using Acoustics and Vision on Smartphones." *ACM MobiCom* 2018.

Priyanka Rajan, Krutant Patel

**Final Exam (Between 12/16/2019 – 12/23/2019. The exact time will be announced later.)**

**Final Project Presentation & Demonstration**