

# JIANLIANG WU

PH.D. STUDENT

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## EDUCATION

### Purdue University

PH.D. IN COMPUTER SCIENCE

- Co-advised by Dongyan Xu and Antonio Bianchi

### Shandong University

M.E IN COMPUTER SCIENCE

- Advised by Shanqing Guo

### Shandong University

B.S IN COMPUTER SCIENCE

- Overall GPA: 85%

West Lafayette, IN, USA

Aug. 2017 - Present

Jinan, Shandong, China

Aug. 2012 - May. 2015

Jinan, Shandong, China

Aug. 2008 - May. 2012

## RESEARCH INTERESTS

IoT Security, System Security, Mobile Security, Program Analysis, Binary Analysis

## PUBLICATIONS

**LIGHTBLUE: Automatic Profile-Aware Debloating of Bluetooth Stacks.** *Jianliang Wu*, Ruoyu Wu, Daniele Antonioli, Mathias Payer, Nils Ole Tippenhauer, Dongyan Xu, Dave (Jing) Tian, and Antonio Bianchi. In Proceedings of the 30th USENIX Security Symposium (Security), 2021

**BLESA: Spoofing Attacks against Reconnections in Bluetooth Low Energy.** *Jianliang Wu*, Yuhong Nan, Vireshwar Kumar, Dave (Jing) Tian, Antonio Bianchi, Mathias Payer, Dongyan Xu. In Proceedings of the USENIX Workshop on Offensive Technologies (WOOT), 2020.

**Best Paper Award**     **CSAW'20 Applied Research Competition Finalist**

**BlueShield: Detecting Spoofing Attacks in Bluetooth Low Energy (BLE) Networks.** *Jianliang Wu*, Yuhong Nan, Vireshwar Kumar, Mathias Payer, and Dongyan Xu. In Proceedings of 23rd International Symposium on Research in Attacks, Intrusions and Defenses (RAID), 2020.

**All your sessions are belong to us: Investigating authenticator leakage through backup channels on Android.** Bai, Guangdong, Jun Sun, *Jianliang Wu*, Quanqi Ye, Li Li, Jin Song Dong, and Shanqing Guo. In 2015 20th International Conference on Engineering of Complex Computer Systems (ICECCS), 2015.

**Best Paper Award**

**PaddyFrog: systematically detecting confused deputy vulnerability in Android applications.** *Jianliang Wu*, Tingting Cui, Tao Ban, Shanqing Guo, and Lizhen Cui. Security and Communication Networks (SCN), vol. 8 no. 13 (2015).

**Automatically detecting ssl error-handling vulnerabilities in hybrid mobile web apps.** Zuo, Chaoshun, *Jianliang Wu*, and Shanqing Guo. In Proceedings of the 10th ACM Symposium on Information, Computer and Communications Security (ASIACCS), 2015.

**TrustFound: Towards a Formal Foundation for Model Checking Trusted Computing Platforms.** Bai, Guangdong, Jianan Hao, *Jianliang Wu*, Yang Liu, Zhenkai Liang, and Andrew Martin. In International Symposium on Formal Methods (FM), 2014.

## WORK EXPERIENCE

### PurSec lab, Purdue University

RESEARCH ASSISTANT

- IoT security research.

### People's Bank of China, Jinan Branch

SENIOR STAFF MEMBER

- System maintenance.

### Software Engineering Lab, NUS

RESEARCH ASSISTANT

- Mobile security research combined with formal methods.

West Lafayette, IN

Aug. 2017 - PRESENT

Jinan, China

Aug. 2015 - Jun. 2017

Singapore

Oct. 2013 - Apr. 2014

## Security Research Lab, Shandong University

RESEARCH ASSISTANT

- Mobile (Android) security research.

Jinan, China

Aug. 2012 - May. 2015

## HONORS & AWARDS

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### Best Paper Award

BLESA: Spoofing Attacks against Reconnections in Bluetooth Low Energy

2020

### Best Paper Award

All your sessions are belong to us: Investigating authenticator leakage through backup channels on Android

2015

### First Prize of Scientific and Technical Innovation

2011

### First Prize of Shandong Province in MCM

2010

## TALKS & PRESENTATIONS

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### BlueShield: Detecting Spoofing Attacks in Bluetooth Low Energy Networks

23rd International Symposium on Research in Attacks, Intrusions and Defenses (RAID'20)

Oct. 2020

### BLESA: Spoofing Attacks against Reconnections in Bluetooth Low Energy

21st CERIAs Annual Security Symposium

Sep. 2020

### BLESA: Spoofing Attacks against Reconnections in Bluetooth Low Energy

14th USENIX Workshop on Offensive Technologies (WOOT'20)

Aug. 2020

## PROFESSIONAL SERVICES

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### SecureComm

Subreviewer

2020

### Conference on Dependable Systems and Networks (DSN)

Subreviewer

2020

### Network and Distributed System Security Symposium (NDSS)

Subreviewer

2020