Fengguo Wei

Curriculum Vitae

Computer Science and Engineering
225 ENB,
University of South Florida,
Tampa, FL 33613

Phone: (785) 320-0857
E-mail: fwei@mail.usf.edu
Url: http://fgwei.arguslab.org/

Education

University of South Florida, Tampa, FL, USA

Ph.D. student in Computer Science, August 2015 – Present
Advisor: Dr. Xinming Ou

Kansas State University, Manhattan, KS, USA

Ph.D. student in Computer Science, August 2012 – August 2015
Advisor: Dr. Xinming Ou

Chinese People's Public Security University, Beijing, China

B.S. in Computer Crime Investigation, September 2008 – June 2012

Profile

My research interests are in computer networks and security with emphasis on:

- Applying static methods for Android security.
- Static analyzer design.
- Android malware analysis.

Research Experience

Graduate Research Assistant August 2015 – Present

Department of Computer Science and Engineering, USF, Tampa, FL

Project: **Mobile Security and Programming Analysis**

Sponsor: University of South Florida, (USF)

- Based upon Amandroid work to design a comprehensive Android application analysis tool chain. Then, apply it into domains like: vulnerability finding, malware detection, etc. The current open source tools including: Argus-SAF (Amandroid is a submodule), Argus-CIT (code inspection IDE plugin for eclipse and intellij), jawa-compiler, jawa2java.
- Android malware categorization and landscape study. By utilizing the tool chains I built during last couple years, I perform a large-scale landscape study to revealing the new threats and evolving trends of Android malware.

Graduate Research Assistant August 2012 – August 2015

Department of Computing and Information Sciences, KSU, Manhattan, KS

Project: **Smartphone Security**

Sponsor: Kansas State University, (KSU)

- Applying static methods for Android security analyzing: The focus is on detecting security issues on Android application. A large portion of those issues can be resolved by addressing one core problem – capturing semantic behaviors of the app such as object points-to and control-/data-flow information. Thus, we designed an approach to conducting static analysis for vetting Android apps, and built a generic framework, called Amandroid, which does inter-component, flow-/context-sensitive data flow analysis. Based on Amandroid, we applied certain security applications on popular Android apps, and the results shows that the tool is capable of finding real security issues and efficient enough in terms of analysis time.

  Amandroid website: http://amandroid.sireum.org/

Industry Experience

Research & Development Intern January 2015 – July 2015

B2B Lab, Samsung Research America, Mountain View, CA

- Mobile system security design.
- Web application/android framework/android application code review. (I reviewed code for Samsung Knox Trust-zone application, and Samsung Pay.)
- Static analysis tool design.

Technical Skills

Programming:	Scala, Java, C, Python, ML, DataLog, LaTeX
Programming IDE:	Eclipse, IntelliJ
Operating Systems:	Mac, Android, Linux, Unix
Version Control Tools:	Git, SVN

Publications

Papers

1. Fengguo Wei, Sankardas Roy, Xinming Ou, Robby. Amandroid: A Precise and General Inter-component Data Flow Analysis Framework for Security Vetting of Android Apps. In the 21st ACM Conference on Computer and Communications Security (CCS 2014).

Posters

1. Fengguo Wei, Sankardas Roy, Xinming Ou, Robby. A Precise and General Inter-component Data Flow Analysis Framework for Security Vetting of Android Apps. In the 35th IEEE Symposium on Security and Privacy. 2014. (S&P 2014)

Professional Activities

Reviewer:

- 6th Annual ACM CCS Workshop on Security and Privacy in Smartphones and Mobile Devices (SPSM 2016)

- 32nd Annual Computer Security Applications Conference (ACSAC 2016)
- 23rd ACM Conference on Computer and Communications Security (CCS 2016)
- 11th ACM Symposium on Information, Computer and Communications Security (ASIACCS 2016)
- 6th ACM Conference on Data and Application Security and Privacy (CODASPY 2016)
- 24th USENIX Security Symposium (USENIX 2015)
- 10th ACM Symposium on Information, Computer and Communications Security (ASIACCS 2015)
- The 9th International Conference on Network and System Security (NSS 2015)
- 30th Annual Computer Security Applications Conference (ACSAC 2014)
- 9th ACM Symposium on Information, Computer and Communications Security (ASIACCS 2014)
- 12th International Conference on Privacy, Security and Trust (PST 2014)
- 9th International Conference on Risks and Security of Internet and Systems (CRiSIS 2014)
- 10th International Conference on Security and Privacy in Communication Networks (SecureComm 2014)

Professional Affiliations

1. The Honor Society of Phi Kappa Phi

Honors and Awards

1. PhD Fellowship, Kansas State University, 2012 - 2014.
2. National grants, China, 2011.