

GÜLİZ SERAY TUNCAY
Android Security and Privacy, Google
E-mail: gulizseray@google.com
Website: <https://www.gulizseray.com/>

Education

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN (UIUC) *Urbana, IL* August 2019
Ph.D. in Computer Science, GPA: 3.96 / 4.0

UNIVERSITY OF FLORIDA (UF) *Gainesville, Florida* December 2013
M.Sc. in Computer Engineering, GPA: 3.86 / 4.0

MIDDLE EAST TECHNICAL UNIVERSITY (METU) *Ankara, Turkey* June 2010
B.Sc. in Computer Engineering, GPA: 3.94 / 4.0, Ranked 1st

Selected Honors & Awards

- ACM SIGSAC Doctoral Dissertation Award Runner-up 2021
- Android Security Reward & Acknowledgement 2017, 2019, 2020, 2021
- Rising Star in EECS Oct 2019
- Cyber Security Awareness Worldwide (CSAW) applied research competition finalist Nov 2018
- UIUC CS Celebration of Excellence Distinguished Paper Award Apr 2018
- Distinguished Paper Award at Network and Distributed System Security Symposium (NDSS) Feb 2018
- Heidelberg Laureate Forum Young Researcher Sept 2017
- Top 5 in ACM MobiCom Student Research Competition Aug. 2012
- Graduate School Fellowship Award, *University of Florida* 2010 - 2013
- Outstanding Achievement Award, *METU, Computer Engineering* 2009, 2010

Selected Publications

- **(In)Security of File Uploads in Node.js.** Harun Oz, Abbas Acar, Ahmet Aris, [Güliz Seray Tuncay](#), Amin Kharraz, Selcuk Uluagac. ACM Web Conference (WWW) 2024. (*Accepted*)
- **Wear's my Data? Understanding the Cross-Device Runtime Permission Model in Wearables.** Doguhan Yeke, Muhammad Ibrahim, [Güliz Seray Tuncay](#), Habiba Farrukh, Abdullah Imran, Antonio Bianchi, Z. Berkay Celik. *IEEE Symposium on Security and Privacy (S&P) 2024.* (*Accepted*)
- **50 Shades of Support: A Device-Centric Analysis of Android Security Updates.** Abbas Acar, [Güliz Seray Tuncay](#), Esteban Luques, Harun Oz, Ahmet Aris, Selcuk Uluagac. *ISOC Network and Distributed System Security Symposium (NDSS) 2024.*
- **{RøB}: Ransomware over Web Browsers.** Harun Oz, Ahmet Aris, Abbas Acar, [Güliz Seray Tuncay](#), Leonardo Babun, Selcuk Uluagac. *USENIX Security Symposium (USENIX Security) 2023.*
- **Evaluating User Behavior in Smartphone Security: A Psychometric Perspective.** Hsiao-Ying Huang, Soteris Demetriou, Muhammad Hassan, [Güliz Seray Tuncay](#), Carl Gunter, Masooda Bashir. *USENIX Symposium on Usable Privacy and Security (SOUPS) 2023.*
- **The Android Platform Security Model (2023).** René Mayrhofer, Jeffrey Vander Stoep, Chad Brubaker, Dianne Hackborn, Bram Bonn , [Güliz Seray Tuncay](#), Roger Piqueras Jover, Michael A. Specter. 2023
- **See No Evil: Phishing for Permissions with False Transparency.** [Güliz Seray Tuncay](#), Jingyu Qian, Carl Gunter. *USENIX Security Symposium (USENIX Security) 2020.* *Awarded security vulnerabilities: CVE-2019-2221*
- **Resolving the Predicament of Android Custom Permissions.** [Güliz Seray Tuncay](#), Soteris Demetriou, Karan Ganju, Carl Gunter. *ISOC Network and Distributed System Security Symposium (NDSS) 2018.*

Awarded security vulnerabilities: CVE-2017-0593, CVE-2019-2200

🏆 **Distinguished Paper Award.**

- **Draco: A System for Uniform and Fine-grained Access Control for Web Code on Android.** Güliz Seray Tuncay, Soteris Demetriou, Carl Gunter. *ACM Computer and Communications Security (CCS) 2016*.
- **Bluetooth Low Energy in Dense IoT Environments.** Albert F Harris, Vansh Khanna, Güliz Seray Tuncay, Robin Kravets. *IEEE Communications Magazine* 2016.
- **Smart LaBLEs: Proximity, Autoconfiguration and a Constant Supply of Gatorade.** Albert F Harris, Vansh Khanna, Güliz Seray Tuncay, Robin Kravets. *IEEE/ACM Symposium on Edge Computing (SEC) 2016*.
- **For Your Eyes Only.** Robin Kravets, Güliz Seray Tuncay, Hari Sundaram. *Workshop on Mobile Cloud Computing and Services (MCS), MobiCom 2015*.
- **Poster-SaveAlert: Efficient and Scalable Sensor-driven Danger Detection System.** Güliz Seray Tuncay, Kirill Varshavskiy, and Robin Kravets, Klara Nahrstedt. *ACM Mobile Computing and Networking (MobiCom) 2014 (SRC Participant)*.
- **Demo: SaveAlert: Design for a Sensor-driven CrowdWatch Danger Detection System.** Güliz Seray Tuncay, Kirill Varshavskiy, and Robin Kravets. *ACM Mobile Systems (MobiSys) 2014*.
- **Participant recruitment and data collection framework for opportunistic sensing: a comparative analysis.** Güliz Seray Tuncay, Giacomo Benincasa, and Ahmed Helmy. *ACM MobiCom Workshop on Challenged Networks (CHANTS) 2013*.
- **Autonomous and distributed recruitment and data collection framework for opportunistic sensing.** Güliz Seray Tuncay, Giacomo Benincasa, and Ahmed Helmy. 2013. *SIGMOBILE Mobile Computing and Communications Review*. (MC2R) Journal 16, 4 (February 2013).

Industry Experience

GOOGLE INC., Mountain View, California

- **Senior Research Scientist, Android Security and Privacy** Oct 2022
Senior security researcher in Android security
- **Research Scientist, Android Security and Privacy** June 2022
Security researcher in Android security
- **Software Engineer, Android Security and Privacy** Oct 2019 - June 2022
Security researcher in Android security
- **Software Engineer Intern, Android Framework** May-Aug. 2017
Project: Multi-user aware spell checker services. Extended Android text services to fully support multiple users simultaneously and resolved numerous bugs of the existing implementation. Tools/Technologies/Languages: Android framework development, Android app development, Java
- **Software Engineer Intern, Android Authentication** May-Aug. 2016
Project: Local Authorization. Developed an API service which enables authorization of client devices on target devices by performing verification locally and offline. The web service provides storage for target devices, access control list management, and authorization credential retrieval to its clients. Tools/Technologies/Languages: Java, One Platform, Zanzibar, Spanner

YAHOO! INC., Champaign, Illinois

- **Software Engineer Intern, Advertising Data Systems** May-Aug. 2014
Project: Event Analysis on Yahoo's MX3 pipeline. Developed a web-based tool for event analysis on Yahoo's MX3 data pipeline, which allowed for to filtering out invalid data from Yahoo's ad pipeline. Tools/Technologies/Languages: Ember-CLI, NVD3, Esper Complex Event Processing engine, Jetty, Java, JavaScript, HTML, CSS

Research Experience

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN, *Department of Computer Science*

- Research Assistant at the Security Lab and Mobius Group 2014 - 2017

UNIVERSITY OF FLORIDA, *Department of Computer & Information Science & Engineering*

- Research Assistant at Mobile Networking Research Lab. Fall 2011- 2013
- Research Assistant at Bioinformatics Research Lab. Spring 2011

MIDDLE EAST TECHNICAL UNIVERSITY, *Department of Computer Engineering*

- Internship on Swarm Robotics at Kovan Research Lab. June–Aug. 2009
- Internship on Ontology Engineering at Intelligent Systems Lab. June–Aug. 2008

Teaching Experience

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN, *Department of Computer Science*

- Teaching assistant for several undergraduate and graduate courses
 - Advanced Computer Security Fall 2018
 - System Programming Spring 2016
 - Communication Networks Spring 2015
 - Wireless Networks Fall 2013

Highlights: For system programming, I taught weekly lab lectures for 2 sections on operating systems and programming concepts, prepared programming assignments, and helped with the implementation of automated tools for grading.
- Guest lecturer for Advanced Computer Security course Fall 2018
 - Taught a lecture on Mobile Security
- Guest lecturer for Computer Security 2 course Spring 2017, Spring 2019
 - Taught two lectures that cover mobile security basics on iOS and Android and some of the infamous attacks on the Android platform along with a discussion of proposed defense mechanisms.

UNIVERSITY OF FLORIDA, *Department of Computer & Information Science & Engineering*

- Teaching assistant for several undergraduate and graduate courses
 - Computer Programming Using C Summer 2013
 - Mobile Networking Spring 2013
 - Computer Networks Fall 2012
 - Distributed Operating Systems Summer 2012
 - Computer Programming Using C Spring 2012
 - Legal and Social Issues in Computing Fall 2010, Fall 2011
 - Software Testing and Verification Summer 2011

MIDDLE EAST TECHNICAL UNIVERSITY, Ankara, Turkey, *Department of Computer Engineering*

- Teaching assistant for Introduction to C Programming Fall 2008, Fall 2009

Service

Technical Program Committee

- USENIX Security Symposium 2022, 2024
- ISOC Network and Distributed System Security Symposium (NDSS) 2024
- ACM Computer and Communications Security (CCS) 2021

- Security and Privacy for Mobile AI Workshop (MAIPS) 2021
- Android Security and Privacy Research (ASPIRE) at Google 2020, 2021, 2022
- Cyber Security Awareness Worldwide (CSAW) applied research paper competition 2019, 2020
- ACM Mobile Systems (MobiSys) Ph.D. Forum 2014
- Computer Science Student Workshop, Sabanci University 2012

External Reviewer

- Workshop on Mobile Computing Systems and Applications (HotMobile) 2016
- ACM Mobile Computing and Networking (MobiCom) 2015
- ACM Mobile Systems (MobiSys) 2014
- IEEE International Conference on Computer Communications (INFOCOM) 2013

Selected Talks & Presentations

- Topic preview talk on Android Security at ACM MobiCom (N2Women workshop) 2020
- See No Evil: Phishing for Permissions with False Transparency.
 - USENIX Security Symposium 2020
 - University of Wisconsin-Madison 2020
 - Florida International University 2021
- Resolving the Predicament of Android Custom Permissions
 - [Midwest Security Workshop](#) 2019
 - [CSAW Applied Research Competition](#) 2018
- Draco: A System for Uniform and Fine-grained Access Control for Web Code on Android.
 - ACM Computer and Communications Security (CCS) 2016
 - Trustworthy Health and Wellness ([THaW](#)) workshop 2016

Impact

- Identification and responsible disclosure of serious security vulnerabilities on Android (CVE-2017-0593, CVE-2019-2200, CVE-2019-2221, CVE-2021-0486) with detailed reports that discuss the root causes and provide possible countermeasures. These issues were acknowledged in the Android Security bulletin and rewarded with Android security rewards by Google.
- Directly impacting the design and implementation of Android with the discoveries of the aforementioned issues as well as with the proposed solutions. My work has led to changes in the official Android releases.
- Contributions to the Android Open Source Project (AOSP) that were released in official Android releases