Omar Alrawi

Georgia Institute of Technology
School of Electrical and Computer Engineering
Atlanta, GA 30332
(510) 545-4778
alrawi@gatech.edu
https://alrawi.io

RESEARCH INTERESTS	Using system and network events to evaluate and improve the security of home-based smart devices, detect and measure threats against smart devices, and apply data science tools to automate and scale these methods.

EDUCATION

Ph.D. in Electrical and Computer Engineering — Enrolled
Georgia Tech — Atlanta, GA

Master of Arts in Linguistics (CERIAS) — May 2009
Purdue University — West Lafayette, IN
Thesis: *Ontological Semantics Spam Filters*
Advisor: Dr. Victor Raskin

Bachelor of Science in Computer Science and Math — May 2007
Purdue University — West Lafayette, IN

HONORS & AWARDS

CSAW Applied Research Competition Finalist — 2019
The Betrayal At Cloud City

Create-X Launch Participant and Finalist — 2019
Award: $4,000

Cyber Security Demo Day Final — 2019
First Place - Research Track
Award: $4,000

Institute for Information Security & Privacy Demo Day — 2019
Best Research Idea
Award: $5,000

President Fellowship — 2016-2020
The President Fellowship is a supplement funding for PhD students
with exemplary levels of scholarship and innovation.

Best Paper Award — 2014
Workshop on Information Security Applications (WISA)

Data Scientist (part-time)		January 2017 to December 2017
Sophos		Abingdon, United Kingdom
Sr. Engineer		June 2013 to August 2016
Qatar Computing Research Institute		Doha, Qatar
Security Engineer		October 2011 to June 2013
Security Intelligence - iDefense - Verisign Inc.		Reston, VA
Consultant		June 2009 to October 2011
Booz Allen Hamilton		Annapolis Junction, Maryland

PUBLICATIONS Roberto Perdisci, Thomas Papastergiu, **Omar Alrawi**, Manos Antonakakis. IoTFinder: Efficient Large-Scale Identification of IoT Devices via Passive DNS Traffic Analysis, In *IEEE European Symposium of Security and Privacy (EuroS&P)*. 2020.

Ranjita Pai Kasturi, Yiting Sun, Ruian Duan, **Omar Alrawi**, Ehsan Asdar, Victor Zhu, Yonghwi Kwon, Brendan Saltaformaggio. TARDIS: Rolling Back The Clock On CMS-Targeting Cyber Attacks, In *IEEE Security and Privacy (Oakland)*. 2020.

Omar Alrawi, Chaoshun Zuo, Ruian Duan, Ranjita Kasturi, Zhiqiang Lin, Brendan Saltaformaggio. The Betrayal At Cloud City: An Empirical Analysis Of Cloud-Based Mobile Backends, In *USENIX Security Symposium (USENIX SEC)*. 2019.

Omar Alrawi, Chaz Lever, Manos Antonakakis, Fabian Monrose. SoK: Security Evaluation of Home-Based IoT Deployments, In *IEEE Security and Privacy (Oakland)*. 2019.

R. Duan, A. Bijlani, Y. Ji, **O. Alrawi**, Y. Xiong, M. Ike, B. Saltaformaggio, W. Lee. Automating Patching of Vulnerable Open-Source Software Versions in Application Binaries. In *The Network and Distributed System Security Symposium (NDSS)*. 2019.

Omar Alrawi, Aziz Mohaisen. Chains of Distrust: Towards Understanding Certificates Used for Signing Malicious Applications. In *Workshop on Empirical Research Methods in Information Security co-located with WWW*. 2016.

Aziz Mohaisen,**Omar Alrawi**. Behavior-based Automated Malware Analysis and Classification. In *Elsevier Computers & Security*. 2015.

A Mohaisen, AG West, A Mankin, **O Alrawi**. Chatter: Classifying Malware Families Using System Event Ordering. In *IEEE Conference on Communications and Network Security (CNS)*. 2014.

Aziz Mohaisen, **Omar Alrawi**. AMAL: High-Fidelity, Behavior-based Automated Malware Analysis and Classification. In *Workshop on Information Security Applications (WISA)*. 2014.

Aziz Mohaisen, **Omar Alrawi**. AV-Meter: An Evaluation of Antivirus Scans and Labels. In *Detection of Intrusions and Malware & Vulnerability Assessment (DIMVA)*. 2014.

Aziz Mohaisen, **Omar Alraw**, Andrew G. West, and Allison Mankin. Babble: Identifying Malware by Its Dialects. In *IEEE Conference on Communications and Network Security (CNS)*.

2013.

Aziz Mohaisen, **Omar Alrawi**, Matt Larson, and Danny McPherson. Towards A Methodical Evaluation of Antivirus Scans and Labels. In *Workshop on Information Security Applications (WISA)*. 2013.

Aziz Mohaisen, **Omar Alrawi**. Unveiling Zeus Automated Classification of Malware Samples. In *Workshop on Simplifying Complex Networks for Practitioners co-located with WWW*. 2013.

Patents   **Systems and methods for behavior-based automated malware analysis and classification**
Patent Number: US9769189B2
Granted: 2017-09-19