Andrew C. Chu

Contact Information chu108@purdue.edu andrewcchu.github.io

CITIZENSHIP

United States of America

EDUCATION

B.S., Computer Science, Purdue University, West Lafayette, IN, USA December 2020

G.P.A.: 3.57/4.00

EMPLOYMENT

R&D Intern (DOE L Clearance) — Sandia National Laboratories

Albuquerque, NM, USA

June 2014 - Present

Configured a virtualized environment comprised of 27 virtual machines using VyOS, and the Xen hypervisor for use in Blue Team training simulations

Developed forensic incident response exercises focused on the areas of web vulnerabilities, macOS exploitation, privilege escalation, and remote code execution

Replicated and visualized Open vSwitch (OVS) vulnerabilities affecting the OVS megaflow cache on a virtualized SDN cluster environment

Implemented updates to an internal yarGen Yara rule classification tool to improve runtime efficiency and practical accessibility

Professional ACTIVITIES

Host — Purdue Old Masters

West Lafayette, IN, USA

September 2018 – November 2018

One of 50 out of over 30,000 undergraduate students selected to organize community outreach between various student organizations on campus, in an effort to promote discussion of diversity, inclusion, and representation

Vice President, Programming and Education — Purdue Interfraternity Council

West Lafayette, IN, USA

November 2017 - November 2018

Coordinated trainings, programs, and conferences with fraternity/sorority relevant industry professionals in efforts to educate over 6,500 Greek community members

PUBLICATIONS

Articles in peer-reviewed conference proceedings

- 1. Andrew C. Chu, Muslum Ozgur Ozmen, Z. Berkay Celik. "The Wild West of Dropshipping -Characterization and Detection of Fraudulent e-Commerce Vendors." In Submission — Proceedings of Network and Distributed System Security Symposium (NDSS), 2021
- 2. Muslum Ozgur Ozmen, Xuansong Li, Andrew C. Chu, Z. Berkay Celik, Bardh Hoxha, Xiangyu Zhang. "Towards Compositional Safety and Security Reasoning in Physical Spaces." In Preparation — Proceedings of the USENIX Security Symposium (USENIX-Security), 2021

Workshops, Presentations & Invited Talks 1. Tracer FIRE 9

| DEF CON 28 BTV, Las Vegas, NV, USA | August 2020 |
|--|-------------|
| University of Arizona, Tuscon, AZ, USA | July 2020 |
| Purdue University, West Lafayette, IN, USA | April 2019 |

2. Thunderbird Cup

| University of New Mexico, Albuquerque, NM, USA | July 2018 |
|---|-----------|
| Benedict College, Columbia, SC, USA | June 2018 |
| University of the Virgin Islands, St. Thomas, Virgin Islands, USA | July 2016 |

AWARDS

Featured Purdue CS article — Volunteering for research leads to first paper

Spring 2020

& Honors

 ${\rm Skills}$

Programming—Proficient in Java, C/C++, Python, Bash.

Experience in R, PowerShell, ARM/x86 Assembly. Markup languages: \LaTeX HTML, CSS, Markdown.

Operating Systems—Mac OS, Linux/*nix, Windows.

Software & Services—Ghidra, AWS (Route 53, ELB, EC2, S3), Autopsy, Elastic Stack.

Languages—English, Mandarin Chinese (Conversational)