Andrew C. Chu

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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

Summer 2018

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, OUTREACH, AND

SERVICE

Workshop Presenter

Sandia National Laboratories Tracer FIRE 9, DEF CON 28 BTV Summer 2020 Sandia National Laboratories Tracer FIRE 9, University of Arizona Summer 2020 Sandia National Laboratories Tracer FIRE 9, Purdue University Spring 2019 Sandia National Laboratories Thunderbird Cup, University of New Mexico

Purdue Interfraternity Council

Vice President, Programming and Education

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

SKILLS

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

Experience in R, PowerShell, ARM/x86 Assembly. Markup languages: LATFX, 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)

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." Pending — 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." Pending Proceedings of the USENIX Security Symposium (Usenix SEC), 2021

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

Spring 2020