Andrew C. Chu

CONTACT INFORMATION	chu108@purdue.edu andrewcchu.github.io

EDUCATION

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

G.P.A.: 3.57/4.00

EMPLOYMENT

R&D Intern (DOE L Clearance) — Sandia National Laboratories (SNL)
Albuquerque, NM, USA　　　　**June 2014 – Present**

Developed forensic incident response programs (Thunderbird Cup, Tracer FIRE) focused on the areas of web vulnerabilities, macOS exploitation, privilege escalation, and remote code execution

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

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

Implemented optimization of an internal YARA rule classification tool to improve runtime efficiency and practical accessibility

PROFESSIONAL ACTIVITIES

Host — Purdue Old Masters
West Lafayette, IN, USA　　　　**Sept. 2018 – Nov. 2018**

One of 50 undergraduate students on campus selected to organize community outreach between various student organizations on campus, to promote discussion of diversity, inclusion, and representation

Vice President, Programming and Education — Purdue Interfraternity Council
West Lafayette, IN, USA　　　　**Nov. 2017 – Nov. 2018**

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

WORKSHOPS, PRESENTATIONS & INVITED TALKS

1. SNL Tracer FIRE
   DEF CON 28 SAFE MODE Blue Team Village　　　　**Aug. 2020**
   University of Arizona, Tucson, AZ, USA　　　　**July 2020**
   Purdue University, West Lafayette, IN, USA　　　**Apr. 2019, Oct. 2019, Oct. 2020**

2. SNL 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 & HONORS

Featured Purdue CS article — Volunteering for research leads to first paper　　　**Spring 2020**

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)