KHUONG LUU

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EDUCATION

Oregon State University   July 2017 - June 2020 (expected)
B.S. Degree in Computer Science. GPA: 3.70. Expect to graduate in June 2020. Senior standing.
Relevant Courses: Advanced Operating Systems, Cyber Attacks & Defense, Computer Networking

EXPERIENCE

DevOps Contributor/Volunteer   January 2018 - June 2018
Civic Software Foundation

· Worked in a DevOps team on an open-source, non-profit project civicplatform.org
· Improved and maintained AWS infrastructure of civicplatform.org that serve its data analysis services
· Developed tools in Bash and AWS Cloud Formation to improve productivity and support development process
· Product: civicplatform.org - GitHub Repository: github.com/hackoregon

Department of Energy's Cyber Defense Competitions   April 2017, December 2018
OSU Security Club Team

· In a team of 6 members, defended a network infrastructure and applications from professional penetration testers while also maintaining reliable services for end users. Our team got 1st place regional, 4th place national in April 2017, and 1st place regional, 3rd place national in December 2018
· Administered, hardened, and found vulnerabilities in Linux hosts, Wordpress, and Django web applications
· Wrote usage documents for end users and technical documents for my team and the competitions' administrators

Research Assistant   January 2018 - Present
Oregon State University

· Develop scripts in Python and Bash to acquire, clean, and import 4 TBs of data of Apache log files to MySQL
· Optimize MySQL to reduce query latency on large data (in progress)
· Build a website for other researchers to query and visualize the data and see the results of the analysis (in progress)

Teaching Assistant, CS162 - Introduction to Computer Science II   December 2017 - Present
Oregon State University

· Mentor and assist students in introductory programming topics with C++ via office hours and discussion board
· Develop Bash scripts that automate or speed up my grading process to spend more time on code review

PROJECTS

dotfiles: Personal configurations for bash, git, vim, tmux. Bring it anywhere with robust 1-hit automated installation. Repository: https://github.com/khashf/dotfiles

JOS - JOS Operating System. Project in my (on-going) Advanced Operating System course
From the existing boilerplate C code, build a full-fledged, bootable operating system. Components include memory management (done), user-level process/environment (done), preemptive multitasking, file system, and shell

tinysh - A Linux shell written in C.
Allow redirection of input & output and support both foreground and background processes by the command line and by receiving signals. Repository: https://github.com/khashf/tinsh

Python Parser - A parser for a subset of Python programming language. github.com/khashf/compyler

Used GNU Flex with regular expressions for lexing, GNU Bison for parsing into abstract syntax tree

ACTIVITIES

Solved 5/7 tasks in 2018 NSA CodeBreaker Challenge which involves Reverse Engineering and Forensics