Curriculum Vitae Allen Aboytes July 2018

Storage Systems Researcher Computer Engineering Department University of California, Santa Cruz PHONE: (559) 667-2434 EMAIL: aaboytes@ucsc.edu allenaboytes.bitbucket.io

Research Interests

Computer Data Storage, Computer Networks, Network Security, Computer Security, Cryptography, Operating Systems, File Systems, and Artificial Intelligence

Employment History

2018-

RESEARCH INTERN, STEM DIVERSITY PROGRAM, UC LEADS, SRE PROGRAM, STORAGE SYSTEMS RESEARCH CENTER (SSRC) AT UCSC, DARRELL LONG, ETHAN MILLER, UNIVERSITY OF CALIFORNIA, SANTA CRUZ, SANTA CRUZ, CALIFORNIA

Working on a steganographic file system to hide data within the free space of an operating system. Developing techniques on finding the free space within multiple types of file systems and probabilistically determining which blocks within a file system would be allocated marking them as 'used.'

2017-2018 (6 mos.)

RESEARCH INTERN, STEM DIVERSITY PROGRAM, UC LEADS, SRE PROGRAM, STORAGE SYSTEMS RESEARCH CENTER (SSRC) AT UCSC, DARRELL LONG, ETHAN MILLER, UNIVERSITY OF CALIFORNIA, SANTA CRUZ, SANTA CRUZ, CALIFORNIA.

Worked on designing a cellular tower geolocation device and integrated that device tracking methodology into a mobile app framework. Tracking is based on Time Difference of Arrival (TDOA) Multilateration. Three physical hardware devices are used to track and locate these towers.

2017-2018

CHEGG TUTOR, CHEGG, SANTA CRUZ, CALIFORNIA.

2016-2018

COMPUTER SYSTEMS AND ASSEMBLY TUTOR, UCSC MESA ENGINEERING PROGRAM, BASKIN SCHOOL OF ENGINEERING, UNIVERSITY OF CALIFORNIA, SANTA CRUZ, SANTA CRUZ, CALIFORNIA.

2016-2017

CO-LEADER/PEER MENTOR, ACADEMIC EXCELLENCE (ACE) PROGRAM, UNIVERSITY OF CALIFORNIA, SANTA CRUZ, SANTA CRUZ, CALIFORNIA.

Education

2019

B.S. Computer Engineering, University of California, Santa Cruz. Concentration in Networks. Cumulative GPA: 3.49 Major GPA: 3.52

Conferences and Presentations

2018 9TH ANNUAL PHYSICAL AND BIOLOGICAL SCIENCES SUMMER RESEARCH SYMPO-

SIUM, UNIVERSITY OF CALIFORNIA, SANTA CRUZ.

Artifice: A Truly Usable Steganographic File System with Credible Deniability

2018 KORET UC LEADS RESEARCH AND LEADERSHIP SYMPOSIUM, UNIVERSITY OF

CALIFORNIA, SANTA BARBARA.

Countersurveillance measures for locating IMSI-catchers

2018 8TH ANNUAL PHYSICAL AND BIOLOGICAL SCIENCES SUMMER RESEARCH SYMPO-

SIUM, UNIVERSITY OF CALIFORNIA, SANTA CRUZ. Countersurveillance measures for locating IMSI-catchers

Honors and Awards

2018 AKIN SCHOLARSHIP.

2017 AKIN SCHOLARSHIP.

2017 VANI SCHOLARSHIP.

2017 MICROSOFT TUITION SCHOLARSHIP.

2016 AKIN SCHOLARSHIP.

2016 MICROSOFT TUITION SCHOLARSHIP.

DEAN'S HONORS, UNIVERSITY OF CALIFORNIA, SANTA CRUZ, SANTA CRUZ, CA-

LIFORNIA. 5 QUARTERS.

Professional Memberships

2015- SOCIETY OF HISPANIC PROFESSIONAL ENGINEERS, UNIVERSITY OF CALIFORNIA,

SANTA CRUZ, SANTA CRUZ, CALIFORNIA.

Chapter Project Manager 2017. SHPE National Conference 2017.

2015-2016 NATIONAL SOCIETY OF BLACK ENGINEERS, UNIVERSITY OF CALIFORNIA, SANTA

CRUZ, SANTA CRUZ, CALIFORNIA. NSBE National Conference 2016

Skills

PROGRAMMING LANGUAGES.

ightharpoonup C/C++.
ightharpoonup JavaScript.
ightharpoonup HTML/CSS.
ightharpoonup PHP.
ightharpoonup SQL.
ightharpoonup LC3 Assembly.
ightharpoonup MIPS Assembly.
ightharpoonup Swift/Objective-C.

OPERATING SYSTEMS.

⊳ Unix/Linux Kernel. ⊳ Debian. ⊳ iOS. ⊳ Android.

LANGUAGES.

⊳ English. ⊳ Spanish.

MISCELLANEOUS.

▷ Arduino. ▷ Raspberry Pi. ▷ MPLabX. ▷ MATLAB. ▷ Databases. ▷ Git.