

AUSTEN BARKER

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EDUCATION

UC SANTA CRUZ | SANTA CRUZ, CA

PhD, Computer Science
2018 – 2022

Dissertation: “*Artifice: Rethinking the Adversary to Design Usable Deniable Storage*”

MS, Computer Science
2017 – 2018

MS Project: “*Artifice: A Deniable Steganographic File System*”

BS, Computer Science
2013 – 2017

SKILLS

PROGRAMMING

C, Python, Java, JavaScript, Go, LaTeX, HTML/CSS, Lisp/Scheme

TOOLS

Linux/Unix Kernel programming, Git, Virtualbox, ESXi, Docker, Mathematica

AWARDS

- Eagle Scout – Troop 30, Los Altos, CA

LEADERSHIP

- Homestead Robotics Team Captain
- Boy Scout Troop 30 Senior Patrol Leader.
- National Youth Leadership Training (NYLT) staff (2009-2013)

RESEARCH

DENIABLE STORAGE SYSTEMS | PUBLISHED

- Designing, implementing, and red team testing a deniable steganographic storage system.
- NSF Award #1814347: CSR small: A Multi-layered Deniable Steganographic File System.

LETHE | PUBLICATION READY

- Efficient disk encryption and secure deletion via key revocation using keyed hash trees.

PROFESSIONAL EXPERIENCE

STORAGE SYSTEMS RESEARCH CENTER |

GRADUATE STUDENT RESEARCHER

APRIL 2017 – PRESENT | UCSC, SANTA CRUZ, CA

- Focus on security, systems, and storage technologies.
- Developing a deniable steganographic storage system and a secure delete capable file system.
- Help with writing and review of papers from other researchers based on storage, security, and non-volatile memories.

DATASTAX | INFORMATION SECURITY INTERN

June 2017 – Dec 2017, June 2018 – Sept 2018 | Santa Clara, CA

- Cloud systems setup and security hardening automation. Security focused VPC log analytics and visualization tool.
- Single-sign-on authentication system for SAAS database.

TIDALSCALE | SOFTWARE ENGINEERING INTERN

JUNE 2016 – SEPT 2018 | LOS GATOS, CA

- Developed administration tools and statistics gather for a distributed hypervisor.
- Oversaw Ubuntu Server certification for software defined server.

UC SANTA CRUZ | TEACHING ASSISTANT

JAN 2018 – MAR 2018 | SANTA CRUZ, CA

- Teaching assistant for CMPS-111 Operating Systems, Winter Quarter. Taught operating systems concepts, application, and introductory implementation.