Bailey Defino

E: bdefino@cs.stonybrook.edu
W: bdefino.github.io

(Residency references omitted for personal safety)

Current Position

2019-Present

Undergraduate Research Assistant, PragSec Laboratory, Stony Brook University
Performing a post-mortem analysis on a recent strain of JavaScript credit card skimmers.
Leading development of a browser extension for their detection and prevention.

Current Classes

⇒ **Graduate Seminar in Computer Security**

Offensive Security • Advanced Systems Programming in UNIX/C

Education

Expected 2021

BS in Computer Science, Stony Brook University

Skills

C • POSIX Shell • Python • JavaScript • Java • R

Parallel Programming • Dynamic Programming • Offensive/Defensive Programming • Network Programming • Pair Programming • Object-Oriented Programming

GCC • GDB • Git • Make • Valgrind • Kbuild • LaTeX • MS Office/LibreOffice

Void Linux

Projects

2020-Present

Loose Cluster
Coding an original decentralized clustering framework in pure C.
Experimenting with convolutional distributed algorithms.

2020

Evolutionary Programmer, bdefino.github.io/evolution.html
A PoC tool for randomly evolving an executable until it performs as expected.
Inspired by the conception of AI in CBS's "Person of Interest."

2019

Linux LKM Rootkit, with B. Valarezo, J. Wong, and J. Liu. github.com/bvalarezo/rootkit
Developed an extensible core for maintaining covert superuser access.
Sharpened teamwork skills and developed a more sophisticated understanding of operating systems.

2019-Present

Anonymized Private Messenger, with O. Sheekey (oishish.github.io).
Designing/implementing an extensible system for exchanging anonymized messages.
Exploring problems with network anonymity and experimenting with pair programming.

2019

Direct Machine Code Execution, bdefino.github.io/execs.html
A tool for testing machine code (via performing a buffer overflow on itself).

References

Nikiforakis, Nick. **Assistant Professor**, Department of Computer Science, Stony Brook University.
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