

# BAILEY DEFINO

E: bdefino@cs.stonybrook.edu

W: bdefino.github.io

(Optimized for internet 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

2017

**Advanced Regents Diploma**, [REDACTED] High School

## 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 • L<sup>A</sup>T<sub>E</sub>X • 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 [REDACTED].

*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).*

## Grants, Honors, & Awards

2017

**Computer Science Scholarship**, [REDACTED] Central High School

## Appointments Held

Summer 2019,

> 40 hrs/week

**Property Manager**, London, UK

*Managed and directed the renovation of an old apartment.*

*Documented faults and assessed solutions at a new property.*

2016-2017

**General Employee**, Krause's Chocolates of [REDACTED]

*Subjectively matched customers with chocolates, cleaned, restocked,  
and hand-packaged said chocolates.*

## References

Nikiforakis, Nick. **Assistant Professor**, Department of Computer Science, Stony Brook University.  
nick@cs.stonybrook.edu

Amin Azad, Babak. **Graduate Research Assistant**, PragSec Laboratory, Stony Brook University  
baminazad@cs.stonybrook.edu