Schuyler Rosefield
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Education

Northeastern University   Boston, MA
PhD Student in Computer Science   Started Fall 2018
Bachelor of Science in Mathematics   Graduated Fall 2017
GPA: 3.49/4.0   Honors: Dean's List

Relevant Coursework:

Computer Systems	Computer Architecture	Theory of Computation
Networks	Network Security	Graduate Cryptography
Numerical Analysis I, II	Graduate Algebra	Probability and Statistics

Work Experience

NGPVAN   Somerville, MA
Software Security Engineer   *May 2015 - August 2018*

- Owner of fixing identified vulneabilities and handling security report list
- Guided and prioritized the engineering security roadmap
- Extended API to allow authentication with ephemeral bearer tokens following the OAuth2 spec
- Created a library to handle encryption key management and automatic key cycling with a simple interface to AES-GCM
- Manual web application penetration testing to identify xss, rce, csrf, and other vulnerabilities
- Implemented framework-level mitigations for the above vulnerability types

Minnesota Department of Human Services   Saint Paul, MN
Application and Architecture Developer   *Summer 2013, 2014*

- Implemented a module to manage financial and case work information for new "Kinship" adoptions to interface between multiple statewide databases
- Consulted and interacted with designers, testers, and end users regularly to ensure that the application met the particular needs of the agency

Personal Projects

- Designed a high performance big number library in C++11 to perform calculations on arbitrary-precision integers (github.com/Rosefield/BigNum)
- Created a distributed file store application using DHTs in asyncio Python (github.com/Rosefield/DHTFileStore)
- Made a program to identify samples of (distorted) audio from a known source (github.com/Rosefield/SongFingerprint)

Computer Skills

- C, C++, C#, x86 asm, Python, SQL
- Usage of git, agile development, and secure software development
- Up-to-date understanding of modern security best practices with particular interest in cryptography

Other Interests

- Completion of wargames (such as those on `https://overthewire.org`) and CTFs (third place at CSAW 2015 finals)
- Attending local cryptography research conferences
- Pair/group fire juggling with torches