

Nicholas B. Anderson

SECURITY ENGINEER · HOST BASED SECURITY DETECTION AND RESPONSE · MALWARE REVERSE ENGINEERING

✉ nanderson7@gmail.com | 🏠 brewfault.io | 📠 muffins | 📺 nanderson7 | 🐦 @poppyseedplehr

Experience

Apple - PRODUCT SECURITY ENGINEER, ECOSYSTEM INTEGRITY PROTECTION

- Reverse Engineered malware samples affecting macOS
- Developed automation infrastructure of macOS
- Developed standardized libraries for analyzing malware

Facebook - SECURITY ENGINEER, DETECTION INFRASTRUCTURE

- Architected and executed EDR cluster infrastructure
- Purchase and integration of third-party DLP
- Core developer and maintainer of osquery
- Developed and maintained host-based endpoint protection
- Administered and orchestrated Carbon Black
- Built endpoint detections leveraging host-based data
- Mentor for Facebook Open Source Mentors
- Rearchitected corporate DNS blacklisting
- Developed security education curriculum
- Developed osquery workshop curriculum

Sandia National Laboratories - CYBER SECURITY R&D SCIENTIST AND ENGINEER

- Malware Reverse Engineer on Security Incident Response
- Reverse Engineered and developed C2 generation
- Mentored Albuquerque High School Cybersecurity

Sandia National Laboratories - GRADUATE STUDENT INTERN

- Member of the TITANS Center for Cyber Defense
- Developed fuzzing framework for email delivery

Trail of Bits - SECURITY INTERN

- Developed platform testing framework for Windows

Handel IT - SOFTWARE DEVELOPER, SYSTEMS ADMINISTRATOR

- C# and .NET software development of RIT
- Systems Administrator for Windows 2003, Windows 7
- Deployed and Administered Nagios Core, Nagios XI
- Administered Windows SCCM server for a large enterprise

Education

New York University, Polytechnic - MASTER OF SCIENCE IN CYBERSECURITY, 3.889 GPA

- SFS ASPIRE Fellowship

University of Wyoming - MASTER OF SCIENCE IN MATHEMATICS, **DID NOT COMPLETE**, 3.42 GPA

- Computing the refined stability condition for the
- Upsilon Pi Epsilon Special Recognition Society

University of Wyoming - BACHELOR OF SCIENCE IN MATHEMATICS, MINOR IN COMPUTER SCIENCE, 3.883 GPA

- Outstanding Graduate, College of Arts & Sciences
- Honor Roll, U.W. President's List, 4.0 Semester
- Varineau Memorial Math Scholarship Recipient

Conference Talks and Workshops

OSDFcon - THE OSQUERY FILE CARVER

OSDFcon - DOCKER DETECTION AND FORENSICS, 'GOTTA CATCH THEM ALL'!

QueryCon - KEYNOTE - EVOLVING OUR OPEN SOURCE COMMUNITY

BlueHat - DETECTING COMPROMISE ON WINDOWS ENDPOINTS WITH OSQUERY

Brucon 0x8 - HUNTING MALWARE AT SCALE WITH OSQUERY

Structure Security - OPEN SOURCE SECURITY PANEL

DEFCON 24 - HUNTING MALWARE AT SCALE WITH OSQUERY

DEFCON 23 - HARDWARE AND TRUST SECURITY: EXPLAIN IT LIKE I'M 5

Skills

Programming	Python, C/C++, x86/x64 Assembly, Powershell, Hacklang, sqlite, R
Security Tools	IDA Pro, BinaryNinja, WinDBG, gdb, Wireshark, tshark, nmap, x64dbg, ollydbg, Metasploit, Empyre
Enterprise Tools	osquery, Chef, Splunk, Graylog, AWS, MD-ATP, Windows Active Directory, GPO, SCCM, pfSense, Carbon Black
Skillsets	Malware Reverse Engineering, Infrastructure, Automation, Digital Forensics, SOAR, Lockpicking, Exploitation, CTFs

Publications

Introducing osquery for Windows -

[HTTPS://WWW.FACEBOOK.COM/NOTES/PROTECT-THE-GRAPH/INTRODUCING-OSQUERY-FOR-WINDOWS/1775110322729111/](https://www.facebook.com/notes/protect-the-graph/introducing-osquery-for-windows/1775110322729111/)

Computing the refined stability condition - [HTTPS://ARXIV.ORG/ABS/1207.4101](https://arxiv.org/abs/1207.4101)