**Hunter J. Gregal**

[huntergregal@gmail.com](mailto:huntergregal@gmail.com) | github.com/huntergregal | huntergregal.com

**EDUCATION**

Champlain College\*, Burlington, VT May 2017

Bachelor of Science in Computer Networking and Cybersecurity 3.9 GPA

* Specialization in Cybersecurity, Minor in Digital Forensics
* President, Computer Networking and Information Security Club
* ITS Division Senator, Student Government Association

**TECHNICAL SKILLS**

|  |  |
| --- | --- |
| * Bash, Java, PHP, Python (preferred), C (preferred), x86, ARM | * Exploit weaponization and development |
| * Linux Internals (userspace and kernel) * Web Application Exploitation | * Penetration Testing Methodologies |
| * Fuzzing | * Reverse Engineering (IDA and Ghidra) |
| * Vulnerability Research (binary and opensource) | * Virtual Environments * Debugging |
|  |  |

**PROFESSIONAL EXPERIENCE**

Grayshift, Remote

Android Vulnerability Researcher Nov 2020 – Present

* Performed independent and team-based vulnerability research on various Android mobile devices. Targets included various models and chipsets
* Weaponized discovered exploits and elevated from research proof-of-concept to ready-to-deploy asset
* Reversed engineered and audited software for bugs across various ARM exception levels and boot stages – including but not limited to:
  + PBL / bootROM
  + Secondary boot loaders: Aboot, Sboot, UEFI-based, U-boot based
  + Trustzone kernel and applications
  + Android HLOS kernel and userspace
  + Modem firmware

Raytheon CODEX/SI, Arlington, VA June 2017 – Nov 2020

Cyber Engineer

* Performed mission-critical vulnerability research on a large variety of targets for customers. Technologies include:
  + Windows Applications
  + Embedded \*nix based devices
  + Modern Android-based systems
  + ARM, x86, MIPS, POWERPC, C, C++ applications and targets
  + Closed source binaries, services, and system
  + Popular opensource and widely used software
* Developed fully weaponized exploits in C and Python ready for field use and integration into existing frameworks
* Discovered and implemented novel persistence techniques across various hardware devices and architectures
* Performed live demos of developed exploits and tools for customers

NuHarbor Security, Burlington, VT June 2015 – 2017

Security Engineer; Cybersecurity Intern

* Conducted both network and application penetration tests for clients
* Assisted in conducting professional security audits and assessments for clients against frameworks such as ISO 27001, ISO 27001, and NIST Cyber Security
* Drafted detailed technical reports with findings from penetration tests and assessments
* Wrote catered Proposals in response to Request for Proposals (RFPs) for government and private entities
* Developed tools and programs utilizing Python, Python-Flask, PHP, and bash
* Performed vulnerability assessments of web applications using various technologies such as Python, Java, PHP, .Net

Senator Patrick Leahy Center for Digital Investigation, Burlington, VT September 2013 – May 2015

Network Administrator

* Managed a Windows domain controller with approximately 50 users
* Tasked with maintaining both a research network and an air-gapped forensics network
* Deployed and maintained multiple virtual server environments (ESXi)
* Oversaw a project team of 3 student researchers working on implementing distributed hash-cracking solutions
* Built and deployed an internal phishing campaign audit on 50+ employees
* Assisted in creating compressive documentation for user policies
* Diagnosed/fixed computer hardware and software related issues
* Implemented automated data backup solutions
* Aided in a senior research project that investigated large-scale deployment of Google Rapid Response (GRR)

(Older work history available upon request)

**Notable ACHIEVEMENTS and ACTIVITIES**

1st Place in “Hack-A-Sat” CTF 2020

* Won Hack-a-Sat finals along with my team “PwnFirstSearch” (PFS).

Unofficial 1st place in PicoCTF 2019 2019

* Discovered and reported vulnerability in competition infrastructure allowing me to steal all flags

Defcon 26 Finals, Las Vegas Nevada 2018

* Qualified for and competed in Defcon 26 CTF Finals with the team “Spaceballs”

MimiPenguin (CVE-2018-20781) 2017

* Researched and developed popular pentesting tool “MimiPenguin”.

North Eastern Collegiate Cyber Defense Competition, University of New Hampshire March 2016, ’15, ‘14

* Tasked with maintaining and defending a network and its services from a team of industry professionals
* Won 3rd place along with 7 other team members (2016)
* Won 2nd place along with 7 other team members (2014)
* First Freshmen student to compete on the Champlain College NECCDC Team

Other notable Capture the Flag Competitions 2013 - Present

* Compete in Capture the Flag Cybersecurity Offensive Competitions building teamwork and problem solving skills in a fast paced environment – keeps knowledge up-to-date and relevant
* Events include: CSAW, PlaidCTF, Google CTF, TokyoWesterns, 0CTF, Hitcon, and more
* 1st Place SarCTF 2020 (PFS)
* 25th Place Defcon CTF Qualifier 2020 (PFS)
* 3rd Place Byte Bandits CTF 2020 (PFS)
* 4th Place SpamAndFlags 2020
* 5th Place B01lers CTF 2020 (PFS)
* 1st Place Blaze CTF 2019 (Nasa Rejects)
* 2nd Place Sunshine CTF 2019 (Nasa Rejects)
* More available upon request

Student Employee of the Year 2015

* Received Champlain College’s first Student Employee of the Year reward

\*Designated a National Center of Academic Excellence in Information Assurance Education by the National Security Agency and the Department of Homeland Security.