Kyle Timmermans

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EDUCATION

NYU Tandon School of Engineering

Brooklyn, NY

Masters in Science - Cybersecurity (3.8 GPA)

August 2021 - May 2023

Scholarship: ASPIRE Scholarship Recipient (SFS CyberCorps)

Courses: Penetration Testing & Vulnerability Analysis, Applied Cryptography, Network Security, Application Security, Information Security & Privacy, Information System Security & Management

Fordham University

Bronx, NY

Bachelor of Science - Computer Science

August 2017 - May 2021

Courses: CompSci I & II (C++), Operating Systems, Algorithms, Data Science, Data Communication & Networking, Theory of Computation, Web Development, Discrete Math, Databases, Data Structures, Web Development, Forensic Computing

Pelham Memorial High School

Pelham, NY

September 2014 - June 2017

Regents Diploma, Advanced Designation

SKILLS SUMMARY

 $\bullet \ \ \, \textbf{Languages} \colon \qquad \text{Python, C++, Go, JavaScript/HTML/CSS, SQL, Bash/Zsh, LaTeX}$

• Platforms: Linux (Debian), MacOSX, Windows, AWS, Web

• Soft Skills: Russian (Intermediate), Teamwork-Oriented, Public Presentations

• Tools: Kubernetes, Docker, git, MySQL, Splunk, Burp Suite, Wireshark, nmap, Metasploit, edb-debugger,

Bettercap, Selenium, gcc, Bootstrap 5, VMWare Workstation, VirtualBox

CVE PUBLICATION

I found a vulnerability in the Learning Management System, Blackboard. I completed a write-up about the issue and followed the necessary steps in having it published by MITRE and NIST. It was given the enumeration: CVE-2020-9008. The publication can be found here, and the write-up is located here.

PROJECTS

I have been programming for my required classes at school and continue to program on my own as a hobby. All of my works/projects can be found here, on the projects page of my website.

Work & Leadership Experience

Sandia National Laboratories

TITANS Cybersecurity Intern)

Remote / Albuquerque, NM May - August 2022

Simulmedia Inc

Manhattan, NY June – July 2021

DevOps Intern

Created a Slack bot that alerts on OpenVPN errors or security issues / events. Written in Python3 and uses a
custom algorithm for finding live updates in a sqlite database and preventing duplicates. Also sends user metrics
and alerts to Datadog. Uses sqlite3, datadog, and webhooks

- Created a date parser in Python3 using the re and datetime libraries. Handles multiple date formats from Unix date timestamps to full month and day names. Returns a datetime object in ISO-8601 standard
- o Improved a Python script that is used to collect the metrics of a service that are then sent to Datadog
- Security Testing / Pentesting Testing and dissecting different routes of microservices and gateways using tools like Burp Suite in order to discover potential security vulnerabilities
- Researched and implemented Multi-Factor Authentication for OpenVPN Access Server
- Researched, compared, and presented findings on potential use of High-Availability, Logging, Metrics, and SSO/SAML in OpenVPN, Wireguard, and in AWS Client VPN
- o Apart of Sprint Reviews every week
- End-of-internship presentation for a company audience of 100+
- Tools / Technologies Used: Git (GitHub), AWS CLI, AWS Linux 2, Python3, Clubhouse.io, Datadog, AWS EC2
 / ECS, AWS IAM, cron / crontab, syslog, AWS Client VPN, json, webhooks, curl, Burp Suite, SQL, Jenkins, Viscosity, LDAP, SSO (OneLogin)

Decipher Technology Studios (greymatter.io)

DevOps Security Intern

Alexandria, VA May – August 2020

- Implemented the use of Open Policy Agent into a service mesh infrastructure in order to help protect sensitive information and Restful API endpoints
- o Designed and wrote policies in the Rego programming language for Open Policy Agent
- Applied the FIPS 140-2 encryption standard to a service mesh built on top of Envoy proxy to ensure FIPS compliance
- Wrote a small Kubernetes config sanitizer in GoLang for security purposes
- o Completed official documentation for projects in Markdown using GitBooks
- Presented work in several product review meetings (SCRUM Meetings Agile Development)
- Used Throughout Internship: Docker, Kubernetes, Envoy Proxy, Git, Bazel, k3d, CircleCI, Helm Charts, Curl, Linux Command Line

Pico Quantitative Trading LLC

Chicago, IL

July 2019

Information Security Team Intern

- $\circ\,$ Created Company Information Security policies including Bluetooth device security and Virtual Machine policies
- Created reports for data collection and organization in Lansweeper by writing SQL scripts that search and organize host information across several Pico networks
- Used PowerShell scripts to streamline network tasks
- Performed GRC Incident and InfoSec compliance work
- Used Microsoft Excel (Pivot Tables) to log Security Incident Reports back to 2016 up until 2019, organized and compiled statistics on elements such as: Risk Type, Severity, and Affected Parties
- Compiled data into a readable summary in Microsoft PowerPoint to represent crucial data trends for Information Security Reports used by the InfoSec team
- o Studied SANS institute InfoSec Policies
- Utilized Microsoft Visio to create detailed virtual schematic models of different networks and devices operated by Pico

Elevated Computing

Manhattan, NY

Information Technology Intern

July - August 2014

- $\circ\,$ Undertook computer science research related to networks and communications
- Responsible for server management and creation of Linux server (Cent OS)
- Utilized Nagios XI to monitor health of client networks/servers
- o Provided IT support to client's employees, including both phone and remote desktop support

Department of Immunology & Microbiology, New York Medical College

Valhalla, NY

Research Assistant

July - August 2015

- \circ Performed bench research related to DNA toxoplasmosis parasite known as T. Gondii
- Used methods such as Polymerase Chain Reaction and Gel Electrophoresis
- $\circ\,$ Attended a conference related to research
- Drafted research paper summarizing research results

Fordham Preparatory School

Assistant Rowing Coach

New Rochelle, NY

May - August 2018

- Driving students to and from the Fordham Prep campus, boathouse, and New Rochelle train station in a Fordham Prep bus
- Driving boat launch alongside rowers whilst coaching
- $\circ\,$ Working with 50+ student athletes to ensure safety and proactivity
- Responsible for organizing and maintaining rowing equipment
- o Created lineups for Freshman, JV, and Varsity sweeping and sculling boats

VIP Beach Club

New Rochelle, NY

May - August 2017 & 2018

Front Gate Security

- Signing in club guests and checking identification
- Charging guests at the register in order to add funds to their respective accounts
- Working with management and guests directly in order to ensure quality of life at the club
- o Guest-Club relations

Huguenot Memorial Youth Group

Pelham, NY / Nindiri, Nicaragua

Mission Trip Member

July 2015 & 2016

- Organized a Spanish class in June of 2015 for participants in an upcoming volunteerism trip to Nindiri, Nicaragua
- o Traveled to Nindiri in July 2015 & 2016 to build homes for impoverished local Nindiri families

College Activities & Affiliations

• Fordham Computer Science Society:

- o Active Member since February 2019
- Robotic building with Arduino boards
- o Presented in student-run Cybersecurity presentation

• Fordham Men's Rowing Team:

- $\circ\,$ Rowed every season since Freshman year
- o Gold Medals at Metropolitan Regatta (2017, 2018, 2019, 2020)
- Bronze Medal at Head of the Housatonic (2017)
- o Experience rowing collegiate Pair, Double, Four, and Eight Boat

• NYU OSIRIS CTF Team:

o Ranked 13th place on CTF Leaderboard - July, 2022 (My profile)

Personal Interests

- Studying & Speaking Russian Language
- Computer Programming: My projects
 - o Python, C++, JavaScript, Zsh/Bash, HTML/CSS
- Crew (Rowing): 9 years
- Soldering & Arduino
- Skiing & Snowboarding
- Hiking, Outdoors, Camping