# Kyle Timmermans

Information Security Specialist

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#### **EDUCATION**

# NYU Tandon School of Engineering

Brooklyn, NY

Master of Science - Cybersecurity

May 2023

NSA National Centers of Excellence in Cybersecurity - Designations: Cyber Defense & Cyber Operations

 ${\bf Scholarship:}\ ASPIRE\ Scholarship\ Recipient\ (SFS\ CyberCorps)$ 

Courses: Penetration Testing & Vulnerability Analysis, Applied Cryptography, Computer Networking, Network Security, Application Security, Information Security & Privacy, Information Systems Security & Management, Database Systems

### Fordham University

Bronx, NY

Bachelor of Science - Computer Science

May 2021

Minor: Cybersecurity

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

Regents Diploma, Advanced Designation

June 2017

#### CERTIFICATIONS

• CompTia Security+ (SY0-601) - July, 2022

#### SKILLS SUMMARY

• Languages: 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, PostgreSQL, Splunk, Burp Suite, Wireshark, nmap, Metasploit, edb-debugger,

Bettercap, Selenium, Tkinter, gcc, Bootstrap 5, VMWare Workstation, VirtualBox, Ghidra, pwntools, Shotcut, cpdf, Kali Linux, hashcat, sqlmap, MS Word / Google Docs, MS Excel / Google Sheets,

MS PowerPoint / Google Slides, MySQL, JavaFX, Jupyter Notebook, Streamlit, Jekyll

#### 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 enjoy programming in my free time and have several projects that are both finished and in the works. I have utilized a number of various languages and libraries for these projects. All of my works/projects can be found here, on the projects page of my website.

#### Work & Leadership Experience

#### Sandia National Laboratories

Remote / Albuquerque, NM May 2022 - Dec 2022

TITANS Cybersecurity Year-Round Intern

date timestamps to full month and day names

Manhattan, NY June – July 2021

Simulmedia Inc 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

- custom algorithm for finding live updates in a sqlite database and preventing duplicates

   Created a date parser in Python3 using the re and datetime libraries. Handles multiple date formats from Unix
- o Improved a Python script that is used to collect the metrics of a service that are then sent to Datadog
- Penetration Testing Testing and dissecting different routes of microservices and gateways using tools such as Burp Suite
- Researched and implemented Multi-Factor Authentication for OpenVPN Access Server

- $\circ\,$  Researched, compared, and presented findings on potential use of key features 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)

Alexandria, VA

DevOps Security Intern

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 policy 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

- $Information\ Security\ Team\ Intern$ 
  - 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
  - o 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
  - 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

- Undertook computer science research related to networks and communications
- Responsible for server management and creation of Linux server (Cent OS)
- o Utilized Nagios XI to monitor health of client networks/servers
- 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

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

#### Fordham Preparatory School

New Rochelle, NY

 $Assistant\ Rowing\ Coach$ 

May - August 2018

- Driving students to and from the Fordham Prep campus, boathouse, and New Rochelle train station in a Fordham Prep bus
- o Driving boat launch alongside rowers whilst coaching
- 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 Front Gate Security

New Rochelle, NY May - August 2017 & 2018

- o Signing in club guests and checking identification
- o 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**

Mission Trip Member

Pelham, NY / Nindiri, Nicaragua July 2015 & 2016

- o Organized a Spanish class in June of 2015 for participants in an upcoming volunteerism trip to Nindiri, Nicaragua
- 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:

- 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 (My profile):

- $\circ\,$  Ranked 4th place on OSIRIS CTF Recruit Leaderboard Nov, 2022
- o Ranked 7th place on OSIRIS CTF Recruit Leaderboard Aug, 2022

#### Personal Interests

- Studying & Speaking Russian Language
- Computer Programming: My projects
- Crew (Rowing): 9 years
- Soldering & Arduino
- Skiing & Snowboarding
- Hiking, Outdoors, Camping