# 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 - Designation: Cyber Defense

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, Mobile Security

# 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, Forensic Computing

# Pelham Memorial High School

Regents Diploma, Advanced Designation

Pelham, NY June 2017

# CERTIFICATIONS (CREDLY)

- GIAC Certified Incident Handler (GCIH) October, 2024
- CompTia Security+ (SY0-601) July, 2022
- NSA-CAE Cyber Defense Designation July, 2023
- Google Cybersecurity Professional Certificate September, 2023

# SKILLS SUMMARY

• Languages: Python, C++, Go, JavaScript/HTML/CSS, SQL, Bash/Zsh, LaTeX

• Platforms: GNU/Linux (Debian-based), 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, IDA Pro,

MITRE ATT&CK

## 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, both completed and in progress. I have used a variety of programming languages and libraries for these projects. All of my projects/works can be found here, on the projects page of my website.

## Work & Leadership Experience

# New York City Cyber Command

Brooklyn, NY

Lead Detection Engineer

Sept 2023 – Present

Sandia National Laboratories

Remote / Albuquerque,  ${\rm NM}$ 

TITANS Cybersecurity Year-Round Intern

May - Dec 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

- o 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
- o Improved a Python script that is used to collect the metrics of a service that are then sent to Datadog
- o 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
- Researched, compared, and presented findings on potential use of key features in OpenVPN, Wireguard, and in AWS Client VPN
- Apart of Sprint Reviews every week
- End-of-internship presentation for a company audience of 100+
- o 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

- o 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
  - o 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
  - o 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
  - o 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**

Research Assistant

Manhattan, NY

July - August 2014

- Information Technology Intern
  - 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
  - Provided IT support to client's employees, including both phone and remote desktop support

#### Department of Immunology & Microbiology, New York Medical College

Valhalla, NY

July - August 2015

• Performed bench research related to DNA toxoplasmosis parasite known as T. Gondii

- 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

Assistant Rowing Coach

New Rochelle, NY

May - August 2018

- o 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

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 July 2015 & 2016

Mission Trip Member

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

# College Activities & Affiliations

#### • Fordham Computer Science Society:

- $\circ\,$  Active Member from February 2019 May 2021
- o Robotic building with Arduino boards
- Presented in student-run Cybersecurity presentation

# • Fordham Men's Rowing Team:

- o 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 (Old profile, New profile):

- o Ranked 1st place on OSIRIS CTF Recruit Leaderboard May, 2024
- $\circ\,$  Ranked 4th place on OSIRIS CTF Recruit Leaderboard Nov, 2022

## Personal Interests

- Studying & Speaking Russian Language
- Computer Programming: My projects
- Crew (Rowing): 8+ years
- Soldering & Arduino
- Skiing & Snowboarding
- Hiking, Outdoors, Camping