

Kyle R. Timmermans
NYU Tandon '23
Fordham University '21
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Pelham, New York - 10803

EDUCATION

New York University – Tandon
Cybersecurity Master's Program
ASPIRE Scholarship Recipient

Brooklyn, NY
May 2023

Fordham University - Bachelor of Science
Major - Computer Science
Minor - Cybersecurity

Bronx, NY
May 2021

Pelham Memorial High School '17
Regents Diploma, Advanced Designation

Pelham, NY
June 2017

Relevant Course Work

- Cybersecurity and Applications, Secure Cyber Networks, Data Communication and Networking, Forensic Computing, Cyberspace: Issues and Ethics, Computer Science I and II (C++), Theory of Computation, Computer Algorithms, Web Development, Database Systems, Operating Systems, Info & Data Management, Software Engineering

Bronx, NY
Sept. 2017 - May 2021

Cybersecurity Experience

- Splunk Fundamentals, Lansweeper, Wireshark, Burp Suite, Bettercap, Nmap, Kali Linux

Bronx, NY
Sept. 2017 - May 2021

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 at <https://nvd.nist.gov/vuln/detail/CVE-2020-9008> and the write-up is located at <https://github.com/kyletimmermans/blackboard-xss/blob/master/CVE-2020-9008.md>.

Programming Experience

I have been programming for my major/minor requirement classes at school and continue to program on my own as a hobby. All of my works/projects can be found at <https://www.kyles.world/projects>.

WORK AND LEADERSHIP EXPERIENCE

Simulmedia Inc
DevOps Intern

Manhattan, NY
June – July 2021

- 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.
- 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.
- 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
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
- 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
- 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
Information Security Team Intern

Chicago, IL
July 2019

- 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

- Studied SANS institute InfoSec Policies
- Utilized Microsoft Visio to create detailed virtual schematic models of different networks and devices operated by Pico

Elevated Computing

Information Technology Intern

Manhattan, NY

July – August 2014

- 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

Research Assistant

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
- 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
- Working with 50+ student athletes to ensure safety and proactivity
- Responsible for organizing and maintaining rowing equipment
- Created lineups for Freshman, JV, and Varsity sweeping and sculling boats

VIP Beach Club

Front Gate Security

New Rochelle, NY

May – August 2017 & 2018

- 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
- Guest-Club relations

Huguenot Memorial Youth Group

Mission Trip Member

Pelham, NY

July 2015 & 2016

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

COLLEGE ACTIVITIES AND AFFILIATIONS

Computer Science Society:

Active Member since February 2019

Robotic building with Arduino boards

Presented in student-run Cybersecurity presentation

Fordham Men's Rowing Team:

Rowing every season since Freshman year

Gold Medals at Metropolitan Regatta (2017, 2018, 2019)

Bronze Medal at Head of the Housatonic (2017)

Experience rowing collegiate Pair, Double, Four, and Eight Boat

Fordham University Emergency Medical Service (FUEMS)

Hands-on **CPR Training**

Basic Life Services (BLS) Training taken at Rose Hill Campus

Working towards being a part-time EMT

Personal Interests

-Studying Italian and Russian Language

-Computer Programming: <https://www.kyles.world/projects>

-Python, C++, JavaScript, Bash, HTML, CSS

-Crew (Rowing): 9 years

-Soldering & Arduino

-Skiing & Snowboarding