Senior Portfolio

RICHARD FLORES

MARYMOUNT UNIVERSITY

GRADUATING FALL 2025

B.S. INFORMATION TECHNOLOGY

MILITARY SERVICE

U.S. AIR FORCE

TRANSFERABLE SKILLS

Ethical Judgment
Service
Vigilance
Patience
Curiosity
Time Management
Problem Solving
Risk Assessment
Resilience
Conflict Resolution
Analytical Thinking
Security Mindset
Situational Awareness
Decision-Making Under Pressure
Effective Communication
Stress Management
Critical Thinking
Team Collaboration
Cultural Awareness
Integrity
Resourcefulness
Excellence
Adaptability
Leadership
Attention to Detail
Self-Discipline

TECHNICAL SKILLS

Linux Tools

Biometrics

Physical Pentest

L3HARRIS

Radio Cryptography

Report Writing

ACADEMIC PROGRESS

Northern Virginia Community College

A.S. Information Technology

Graduated Fall 2023, Cum Laude

RELEVENT COURES:

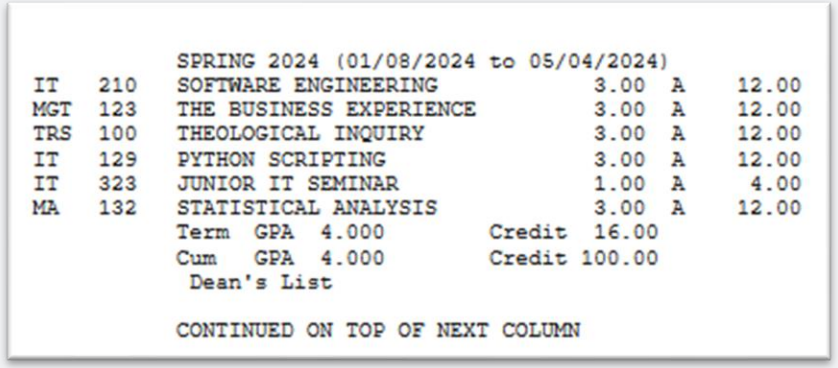
Network Communication-Security-Authentication
Network Security Basics
Computer Science I
Scientific Programming
Programming Tools
Microcomputer Operating Systems
Personal Computer Hardware and Troubleshooting
Introduction to Telecommunications
Spreadsheet Software
Intro. to Digital & Information Literacy & Computer Apps.
Introduction to Human Communication

RECOGNITIONS:

Presidential Scholars List, Fall 2023
Presidential Scholars List, Spring 2023
Dean's List, Fall 2022

ACADEMIC PROGRESS

MARYMOUNT UNIVERSITY



SPRING 2024 (01/08/2024 to 05/04/2024)

IT	210	SOFTWARE ENGINEERING	3.00	A	12.00
MGT	123	THE BUSINESS EXPERIENCE	3.00	A	12.00
TRS	100	THEOLOGICAL INQUIRY	3.00	A	12.00
IT	129	PYTHON SCRIPTING	3.00	A	12.00
IT	323	JUNIOR IT SEMINAR	1.00	A	4.00
MA	132	STATISTICAL ANALYSIS	3.00	A	12.00

Term GPA 4.000 Credit 16.00
Cum GPA 4.000 Credit 100.00
Dean's List

CONTINUED ON TOP OF NEXT COLUMN

B.S. Information Technology

Minors: Cybersecurity, Digital Forensics, & Network Security

RELEVENT COURES:

Cybersecurity-Attack & Defend *(registered)*
Corporate Cybersecurity *(registered)*
Software Testing and Quality Assurance *(in progress)*
Software Engineering
Advanced Python Applications *(registered)*
Python Scripting
Database Technology *(in progress)*
Cloud Computing *(in progress)*
Statistical Analysis
Project Management *(in progress)*
Cyberethics *(registered)*
IT Internship *(in progress)*
Capstone Project *(registered)*

rmfloresii.github.io

RECOGNITIONS:

Dean's List, Spring 2024

INTERNSHIP:

Cybersecurity Research Assistant
Automated Red Team Infrastructure Deployment

CERTIFICATIONS

CompTIA

A+ (RFQZ0K7Z22Q1QLWY)

Security+ (GXDHFHZYN2EE1090)

Cybersecurity Analyst CySA+ (GK9DW3LTBJVQQG58)

Security Analytics Professional

verify.CompTIA.org

ISC²

Certified in Cybersecurity CC (061397)

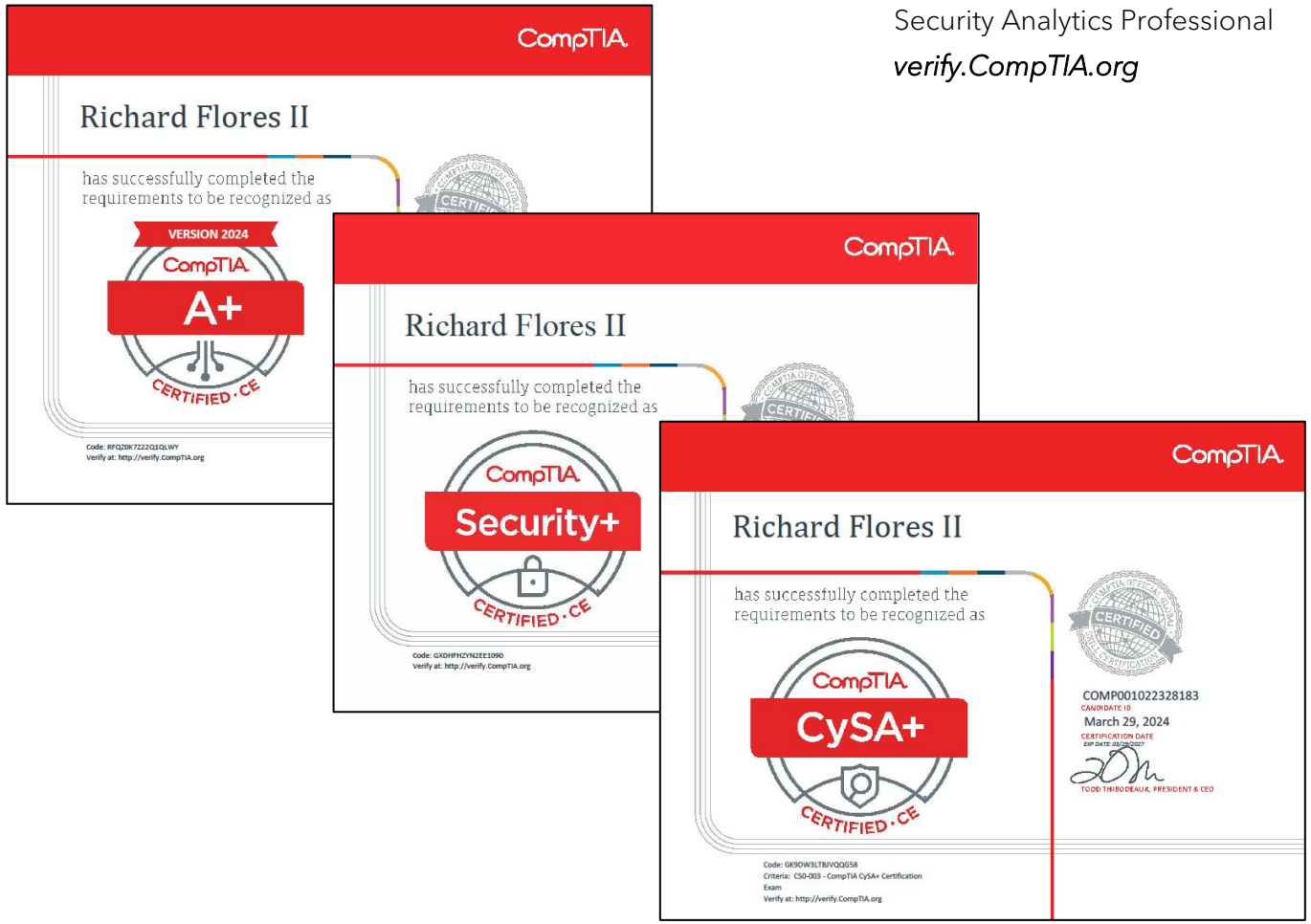
isc2.org/MemberVerification

CTIA

Wireless Industry Service Excellence (WISE) Lvl. I

WISE Lvl. II (21854)

ctiacertification.org

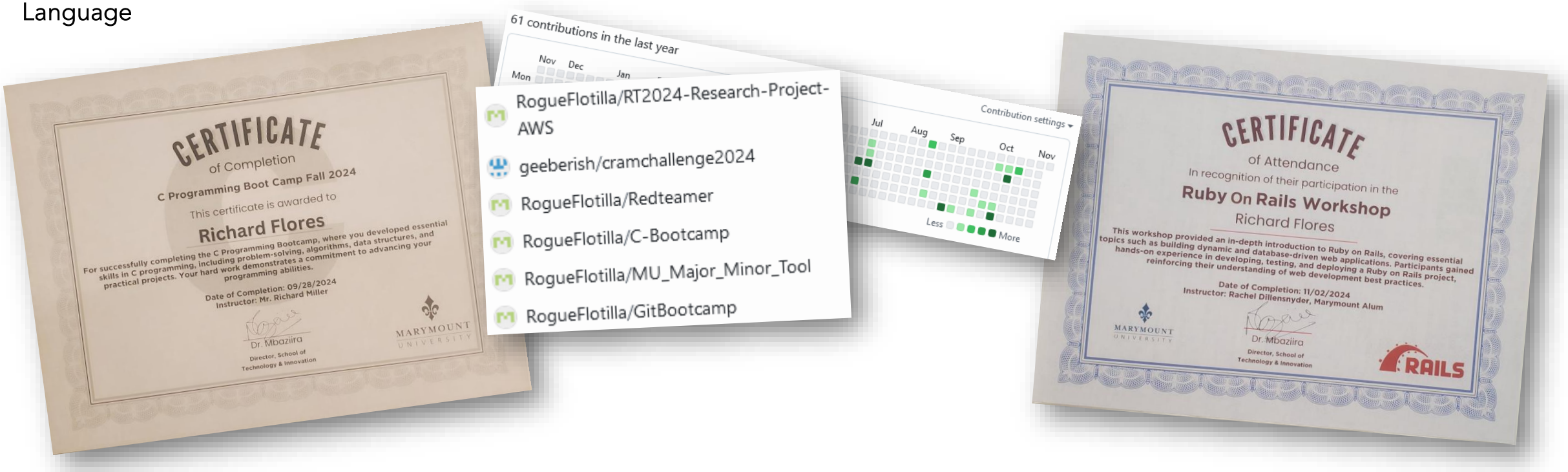


TECHNICAL WORKSHOPS

C Programming Language

Git / Github

Ruby on Rails



SAMPLES OF WORK: DIGITAL FORENSICS

LAB REPORT

Project Questions to Answer

2012 National Gallery DC Attack

Richard Flores

Northern Virginia Community College

ITN 262 01YA

Prof. "Michael" Hon

December 4, 2023

E. Map showing plots of photo locations and other GPS data from navigation and browsing history. (DOUBLE CLICK TO OPEN AND SEE PLOTS)

Majavian Artwork (Alex/Cary)

A. Perry Patsum asks King for help with the heist and threatens/blackmails King to get his parole officer to drug test if he doesn't help.

Tracy Phone

B. King agrees to help and needs some supplies.

I. Summary

This report covers a period of time between approximately July 6, 2012, to July 15, 2012, involving two separate crime plots intermingled together due to the connection of one person, Tracy (a.k.a. Coral), in both conspiracies. Tracy is a divorced mother of one who is having financial struggles and is likely unable to continue affording the private school her daughter, Terry, attends. She has asked her ex-husband, Joe, for assistance, but he has made no commitments to help.

Some memorandums involving shipping details and insurance for a stamp display coming to the DC Art Gallery have come across Tracy's desk, and she becomes aware of their value. She enlists the assistance of her brother, Pat (a.k.a. Perry), and a police detective, who is willing to assist his sister in the planning of the theft of the stamps. Pat recently caught a parolee, king, in violation of his parole. King now owes Pat a favor, so he is blackmailed into helping as the robber for the plot.

The second plot involves a group of Krasnovians and Krasnovian sympathizers who plan on defacing a Majavian art display at the art gallery. Carry (a.k.a. Cat) is contacted by her "uncle" (family friend), Alex, and both start planning for the attack on the art display. Alex is sending several Krasnovian militants to the US to assist Carry in the plot. Carry sends some files to assist in the forgery of ePassports to get them into the country. She is coordinating with a flash mob coordinator, Drex Mustafar (a.k.a. Mike), who is likely one of the Krasnovian militants. It is unclear if they are going to use a flash mob as a distraction, or if this is merely a codeword for the attack. Carry enlists Tracy's help in smuggling her tablet into the art gallery which is used to transport details of the security, events, locations, and images from the art gallery.

D. Tablet Photos Timeline (locations determined using names/addresses within photos themselves, Google Lens image search, and Google Street View tracking between identified locations on either side of photo).

a. Carry meets someone for dinner at Firehook Bakery on July 8th. This does not match up with the time Tracy met her brother for lunch on July 6th. Could be a meeting for the defacement plot.

b. There are photos of security cameras the morning of Carry transferring the tablet to Tracy. Perhaps scoping out the outside security? There was no identifiable information or GPS data to pin down the location.

c. There are photos from Roaches run contained on the tablet the day after it was smuggled into the Gallery. Either the Shien person is another accomplice, or an alias of Carry and Tracy was returning the tablet to her there.

Photo	Location	Timestamp	
	Crate & Barrel 2800 Clarendon Blvd Arlington, VA 22201	July 7, 2012	5:49 PM
	Firehook Bakery 1909 Q. St. NW Washington, DC 20009	July 8, 2012	5:31 PM

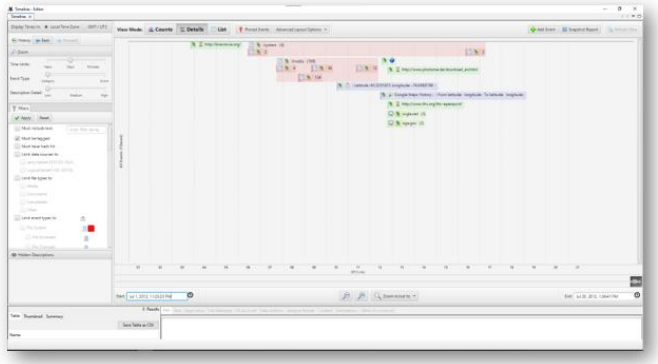
III. People

1. A spreadsheet compiled of data of all the people involved.

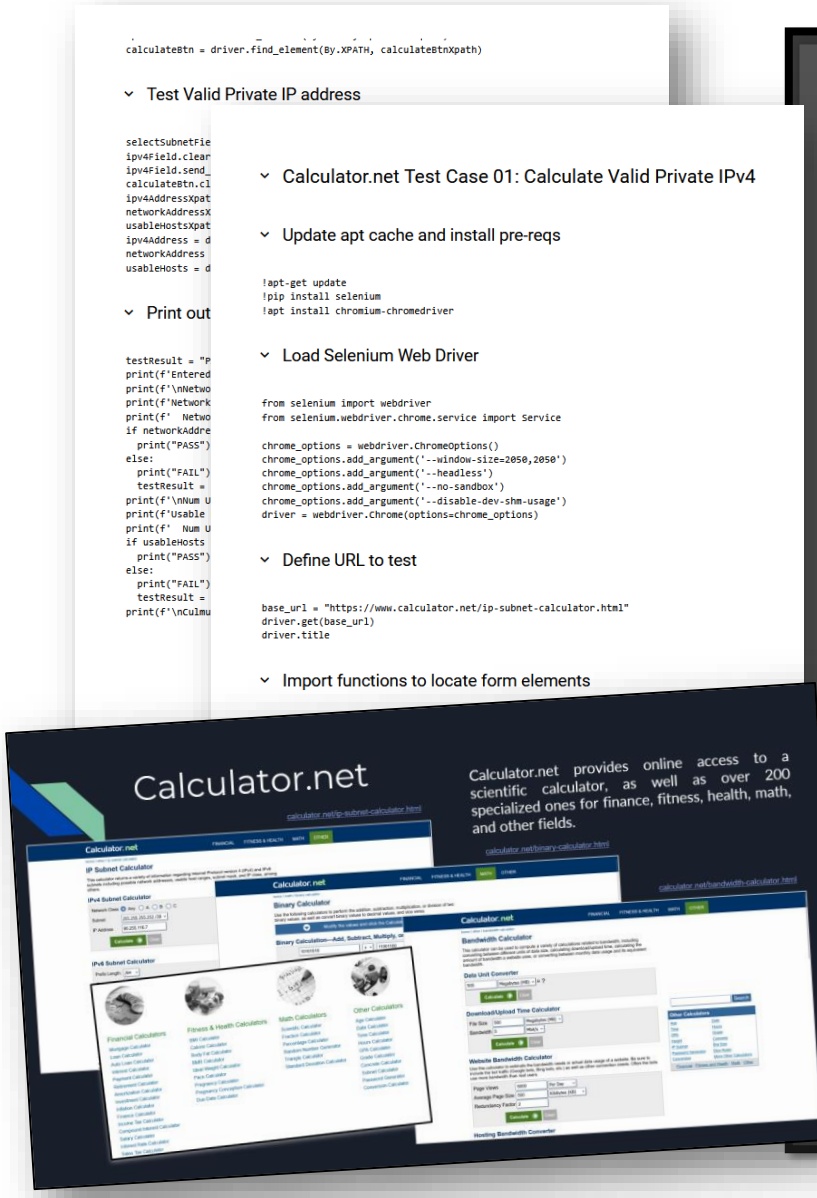
Name	Description
Alex J.	Wealthy Krasnovian bus
Carry Sums a.k.a. "Cat"	Krasnovian supporter in
Drex Mustafar a.k.a. "Mike"	Suspected Krasnovian
unknown person	Possible Krasnovian m
Parhem Shien ?	Possible Krasnovian m
King	Criminal, busted by
Perry Patsum a.k.a. "Pat"	Tracy's brother, Police
Tracy Sumtwelve a.k.a."Coral"	Supervisor at National A
Terry Sumtwelve	Tracy/Joe's Daugh
Joe Wumtwelve	Tracy's ex-husbar
Jamie?	Who is Jaime?

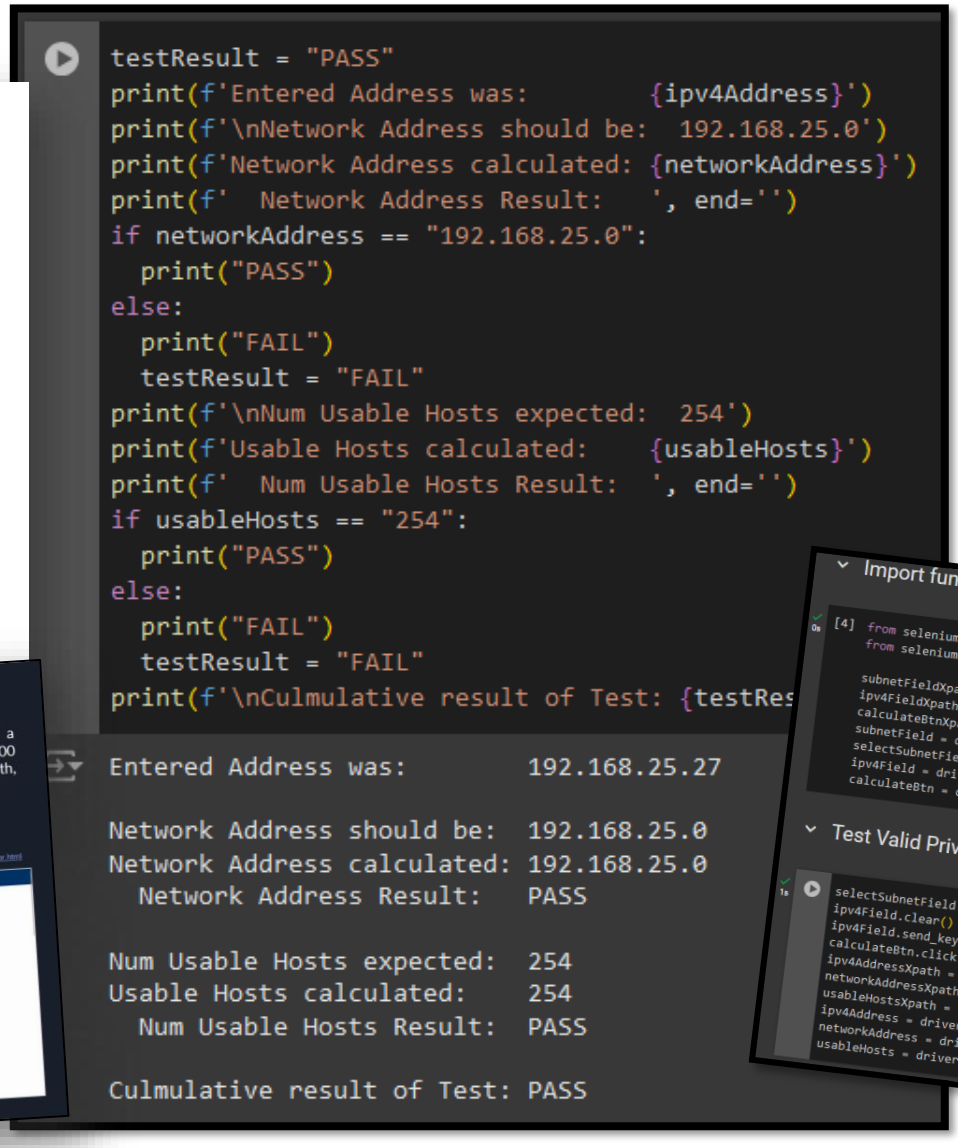
Flores_Richard_Project People.xlsx

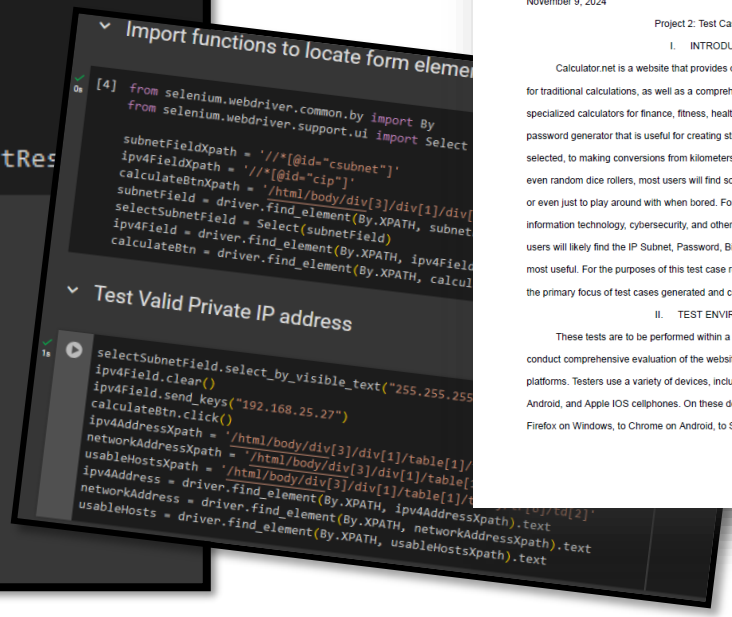
F. Timeline from Autopsy of flagged material/items/events.

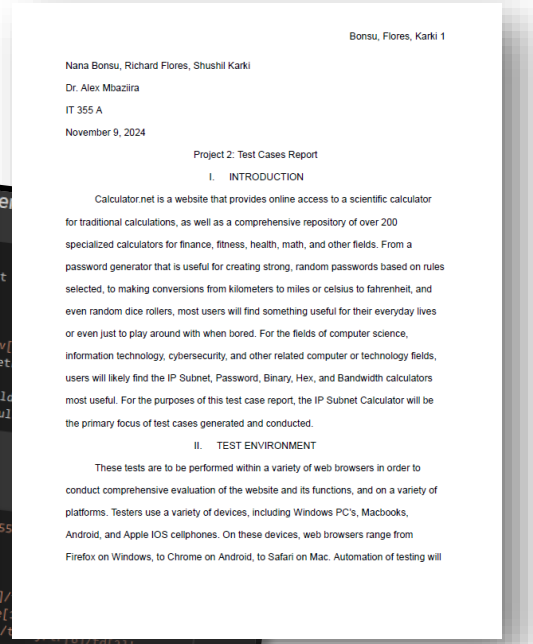


SAMPLES OF WORK: UNIT TESTING









SAMPLES OF WORK: CYBERSECURITY ASSESSMENT

```python
calculate_modified_scores.py > ...
if __name__ == "__main__":
    with open('./sue_data/json_data/individual_files_archive/combined_vulnerabilities_data_file.json') as detected_vulnerabilit
        combined_vulnerabilities_data = json.load(detected_vulnerabilities_file) # manually load combined_vulnerabilities_data
    cves = set([item["CVE Number"] for item in combined_vulnerabilities_data]) # disting set of detected CVE's
    with open('./sue_data/json_data/individual_files_archive/node_criticality_mapping_file.json') as node_criticality_mapping_f
        node_criticality_mapping = json.load(node_criticality_mapping_file) # manually load node_criticality_mapping
    system_evaluation_scores = { # simulate being passed the 3P's
        'personnel_score': 0.45,
        'physical_security_score': 0.5,
        'policies_score': 0.55
    }
    apt_cve_evaluation_scores = {} # create empty dictionary for LLM APT score metrics

    for cve in cves:
        cve_number = cve # simulate CVE being analyzed against APT data
        apt_score = .52 # simulate creating LLM apt score for specified CVE
        reasoning = "reasoning ... ... ... blah blah blah ... APT's BAD!!!" # simulate creating LLM r
        dictionary = {'apt_score': apt_score, 'reasoning': reasoning} # build sub-dictionary
        apt_cve_evaluation_scores[cve_number] = dictionary # append sub-dictionary to dictionary

                                                    _mapping, system_evaluation_scores, apt_cve
                                                    results
                                                    l_score', 'environmental_score', 'apt_threa
```


```
PS C:\Users\rmflo\source\repos\cramchallenge2024> & "C:/Program Files/Python312/py
4/calculate_modified_scores.py
```

CVE Number	Base	Temporal	Environmental	APT Threat Index
CVE-2023-20269	9.1	9.1	9.8	9.9
CVE-2023-20256	5.8	5.8	6.7	6.9
CVE-2023-20247	4.3	4.3	5.0	5.2
CVE-2023-20200	6.3	6.3	8.4	8.5
CVE-2023-20095	8.6	8.6	10.0	10.0
CVE-2023-20015	6.7	6.7	6.7	6.9
CVE-2023-20934	7.8	7.8	7.8	7.9
CVE-2018-0284	6.5	6.5	8.3	8.4
CVE-2014-7999	7.7	7.7	8.0	8.1

3P's, ACRES (Physical, Personnel, Policies)

PSS = Physical Security Score: 0 to 1, **PTS** = Personnel Training Score: 0 to 1, **OPS** = Operating Policies Score: 0 to 1

Environmental Score, CVSSv3.1

3P's assigned by Llama 3.1:70b after generalizing JSON representations of system summaries and comparing to security best practices provided by the NIST Notional CSF 2.0 Profile Template.

*If **mScope** is UNCHANGED :*

$$Ceiling[Ceiling(Min[(mImpact + mExploitability), 10]) \times CodeMaturity \times RemedLevel \times ReportConf]$$

*If **mScope** is CHANGED :*

$$Ceiling[Ceiling(Min[1.08 \times (\mathbf{mImpact} + \mathbf{mExploitability}), 10]) \times \mathbf{CodeMat} \times \mathbf{RemedLevel} \times \mathbf{ReportConf}]$$

***Modified Impact Sub Score** (mImpact)*

$$Min[(1 - [1 - mImpConf \times \mathbf{ConfReq}] \times [1 - mImpInt \times \mathbf{ImpReq}] \times [1 - mImpAvail \times \mathbf{AvailReq}]), 0.915]$$

where $\mathbf{ConfReq}, \mathbf{ImpReq}, \mathbf{AvailReq}$ = Node Criticality Rating...LOW: 1, MEDIUM: 2, or HIGH: 3

***Modified Exploitability Sub Score** (mExploitability)*

$$8.22 \times \mathbf{mAttackVector} \times \mathbf{mAttackComplexity} \times \mathbf{mPrivilegeRequired} \times \mathbf{mUserInteraction}$$

where $\mathbf{mAttackVector}$ =NETWORK: 0.85, ADJACENT: 0.62, LOCAL: 0.55 $- Ceil^{100}(\frac{PSS-0.5}{10})$, PHYSICAL: 0.20 $- Ceil^{100}(\frac{PSS-0.5}{5})$

where $\mathbf{mAttackComplexity}$ = (HIGH: 0.44, LOW: 0.605, NONE: 0.77)

where $\mathbf{mPrivilegeRequired}$ = (HIGH: 0.27|0.50, LOW: 0.62|0.68, NONE: 0.85|0.85) SCOPE UNCHANGED|CHANGED

where $\mathbf{mUserInteraction}$ = NONE: 0.85, REQUIRED: 0.62 $- Ceil^{100}\left(\frac{PTS-0.5}{2.5}\right) - Ceil^{100}\left(\frac{OPS-0.5}{5}\right)$

APT Score is assigned per vulnerability by Llama 3.1 after generalizing CVE description and APT TTP's and summaries from https://apt.threattracking.com/.

APT Threat Index Score, ACRES

If $\mathbf{modifier} < 0$: Ceiling[**EnvironmentScore** + $(max[\mathbf{modifier}, -3.3] \times [(\mathbf{aptScore} \times 2) - 1])$]

Else: Ceiling[**EnvironmentScore** + $(min[\mathbf{modifier}, +3.3] \times [(\mathbf{aptScore} \times 2) - 1])$]

where $\mathbf{modifier} = abs(10 - \mathbf{EnvironmentScore})$

Sources:
nist.gov/cyberframework/profiles
apt.threattracking.com

EXTRACURICULAR ENGAGEMENT

Student Government

Senator, 2004 - 2005
Budget Committee

Challenges

Cyber Resiliency and Measurement Challenge

Summer Camps

DC Public Schools
GenCyber

Clubs

Intelligence Club, Cyber Club, Food for Thought, WiCyS, Grit & Grime League

FUTURE PLANS

SHORT TERM

- Current internship extending through February 2025 for publishing work
- Received conditional offer for Department of State internship, Summer 2025

United States Department of State

Washington, D.C. 20520

November 6, 2024

Dear Richard:

Congratulations! The U.S. Department of State's Bureau of Global Talent Management, Talent Acquisition Managing Directorate, Office of Intake, Planning and Onboarding (GTM/TAC/IPO/ON) is pleased to extend to you a conditional offer as a Primary selectee for an internship with the Paid Student Internship Program for the Summer 2025 season. Acceptance or declination of this

LONG TERM

- Graduating Fall 2025
- Continuing with M.S. Cybersecurity
- Seeking Government employment

Thank You

CONTACT INFORMATION

Email: rmf89685@marymount.edu
email@rflor.es
LinkedIn: linkedin.com/in/rmfloresii
GitHub: github.com/RogueFlotilla
Portfolio: rmfloresii.github.io