

NICOLE CONILL

18 Kristopher Lane, West Townsend, MA 01474
Phone: (978) 846 – 5699 E-Mail: nconill@wpi.edu

QUALIFICATIONS SUMMARY

Country of Citizenship: United States of America

Veterans' Preference: None

Highest Grade: GS-07

Clearance: SECRET; Granted by DoD CAF; Investigating Agency: OPM; Type: Tier 3

Seeking opportunity to protect the people of the United States of America through cyber defense against criminal and foreign activity. Highly motivated and accomplished undergraduate; a CyberCorps: Scholarship for Service student and have previously gained experience and mission-dedication working through security internships.

PROFESSIONAL EXPERIENCE

06/2022 – 08/2022 **Air Force Civilian Service - Premier College Intern Program (PCIP)**

Hanscom Air Force Base, MA

HBAW (Weather Systems Branch)

Salary: GS-1599-07, Step 1; Hours/Week: 40

Supervisor: Bruce Lambert, bruce.lambert.4@us.af.mil

Project Lead: Major Jason Fontenot, jason.fontenot.5@us.af.mil

Projects:

Bridging Environmental Intelligence For Responsive Operational Support (BIFROST) Portal:

Supported the release of the BIFROST Portal through the development, security, operations (DevSecOps) process:

Developed and used Moderator's Guide to conduct user interviews with the minimum viable capability release (MVCR). Researched weather personas in the Air Force and Army and applied them to respective tasks within the BIFROST portal MVCR.

Developed a continuity binder for the incoming lead BIFROST Portal Engineer and any other future incoming BIFROST team members.

Continued...

Involved documenting an overview of BIFROST and its history, and the Lead Engineer's role and responsibilities.

Shadowed the Dark Wolf Solutions cyber team to review the security issues in the BIFROST Portal discovered through Hack the Weather. Attended weekly backlogs and syncs to learn the process of how security issues are assigned to team members through Jira. Helped track down hardware and software lists used in the Air Force Weather Virtual Private Cloud (AFW VPC) in the pursuit of continuous authority to operate (ATO).

Hanscom Security Incident Response:

Assisted the Hanscom IT Team in response to a division wide security incident. Included the intake of over two thousand laptops, the sorting and returning of re-imaged laptops, and gaining an overall understanding of how massive security incidents are handled.

06/2021 – 08/2021 Air Force Civilian Service - Premier College Intern Program (PCIP)

Hanscom Air Force Base, MA

Cyber Resiliency Office for Weapon Systems (CROWS) Department

Salary: GS-1599-04, Step 1; Hours/Week: 40

Supervisor: Morgan D'Olympia, morgan.dolympia.2@us.af.mil

Project Lead: Jeffrey Tretola, jeffrey.tretola@us.af.mil

Projects:

HBA Cyber Dashboard:

Worked with Microsoft Power BI software to create a consolidated visualization of cyber security data for various HBA (Air Force division) programs. Cyber data included Authorization to Operate (ATO) data, Department of Defense Chief Information Officer (DoD CIO) Scorecards, Cyber Hygiene reports, and signed cyber compliances.

CROWS Aware Learning Path:

Completed numerous Air Force training courses as seen in the CROWS staff training. Courses were completed through Defense Acquisition University (DAU), Air University (AU) and other Air Force orientations.

Courses completed included: Avionics Cyber Vulnerability Assessment, Mitigation, and Protection (ACVAMP), Cyber Training Range, Cybersecurity Throughout DoD Acquisition, Data Markings, Fundamentals of Systems Acquisition Management, Introduction to Trusted Systems and Networks, and Introduction to Systems Engineering.

Continued...

05/2020 – 08/2020

Cyber Security Intern

The MITRE Corporation, Bedford, MA

Trust & Assurance Cyber Technologies (T8A7) Department

Salary: \$46,000 (\$22.12 per hour); Hours/Week: 40

Supervisor: Eitan R. Check, echeck@mitre.org

Projects:

Windows Kernel Integrity Monitor (WinKIM):

Worked to update the existing provisioning code used in the process of running WinKIM (comparing a target Windows kernel to the binary code of an existing valid kernel state, in order to identify any malicious underlying operating systems code / malware). Worked with a team of other engineers to analyze new threat mitigation scripts and combine them into the existing five-step measurement code to utilize WinKIM.

Individually created new provisioning scripts to analyze kernel modules, which involved heavy use of the Python language and GitLab, as well as an understanding of databases as used in PostgreSQL.

Aircraft Communications Addressing & Reporting System (ACARS) Emulator:

Created an ACARS emulator to simulate the connection between a plane's Very-High-Frequency Data Radio (VDR) and the plane's Communication Management Unit (CMU) in order to analyze potential security risks. Work utilized the ARINC 429 technical standard.

Served on a team of three as the Elasticsearch and Kibana software expert. Work included ingesting and analyzing data from emulator operation in order to assess functionality and utilizing data to determine security risks. Information reported from Kibana was essential to developing the emulator and understanding risks and defense solutions.

Multi-Function Control and Display Unit (MCDU) Crawler:

Contributed to the creation of a program used to automatically crawl through all menu pages of a plane's MCDU, while tracking any pages that may require future maintenance. Also supported assessing the security vulnerabilities of the MCDU hardware including labels used to describe an aircraft in hidden menu pages. Simulated button presses on the MCDU, and mapped pages traveled to which involved heavy use of the Python language. Work also utilized knowledge of the ARINC 429 technical standard, Elasticsearch, Kibana, Bitbucket, Linux / Ubuntu and company-exercised programs.

Continued...

EDUCATIONAL BACKGROUND

- 05/2022 – 12/2022** **Master of Science in Computer Science
Specialization in Cyber Security**
Worcester Polytechnic Institute (WPI), Worcester, MA
Semester Credits: 21 / 30; GPA: 3.90 / 4.00
- 08/2018 – 05/2022** **Bachelor of Science in Computer Science
Concentration in Cyber Security
Minor in Law & Technology**
Worcester Polytechnic Institute (WPI), Worcester, MA
Honors: High Distinction; GPA: 3.78 / 4.00
-

HONORS & AWARDS

- 09/2020 – Present** **CyberCorps: Scholarship for Service Recipient**
Selected by a panel of WPI faculty and staff to receive a highly competitive (acceptance rate is under 20%) federal scholarship funded by the U.S. Congress through the National Science Foundation. Funding includes full tuition and an annual stipend to allow focus on studying cyber security and obtaining summer internships with federal agencies in a security role. After graduation, recipients find full-time employment with federal agencies.
- 07/2022** **HBAW Engineer of the Month**
Received the Air Force Engineer of the Month award for the Weather Systems Branch due to work related to the BIFROST Portal and willingness to assist the IT Team during a security incident.
- 05/2022** **WPI Commencement Student Speaker**
Selected to represent the WPI Class of 2022 as the student speaker at the undergraduate commencement. Performed a five-minute speech in front of over 5000 people.
- 02/2021 – Present** **Upsilon Pi Epsilon (UPE) - Computer Science Honor Society**
Induction based on distinguished computer science achievements.
- 08/2018 – 05/2019** **Charles O. Thompson Scholar**
Awarded to WPI first-year students for excellence in academics.

Continued...

Fall 2021	WPI Dean's List
Spring 2021	Awarded to WPI undergraduate students who complete 4 courses with grades of A's, and at least an additional 2 courses with grades of B's or above, per semester.
Fall 2020	
Fall 2019	
Spring 2019	

VOLUNTEER WORK & COMMUNITY INVOLVEMENT

03/2019 – 03/2022	WPI Women in Cyber Security (WiCyS) President Established an official WiCyS student chapter at WPI with a co-founder. The club's mission is to support women in gaining knowledge of cyber security and pursuing careers in this field. Club activities include skill-building workshops, capture-the-flag teams, and attending the annual conference of the national WiCyS organization.
02/2019 – 03/2021	WPI Cyber Security Club (CSC) Secretary Served as an administrative executive for CSC affairs while actively planning and participating in club meetings and events. The club's mission is further the cyber security knowledge of its' members through activities such as guest presentations, participating in capture-the-flag events, and creating the annual WPI Capture the Flag event.
05/2017 – Present	United States Coast Guard Auxiliary (USCGAUX) Member Includes participation in mandatory Auxiliary training and as a volunteer civilian on stand-by. Member activities support the mission of promoting recreational boating safety and other Coast Guard operations. Member in Flotilla 10-03 of Gardner, MA.
11/2019 – Present	WPI Wrestling Team Head Manager Includes traveling and supporting the needs of both the coach and team during the National Collegiate Athletic Association (NCAA) wrestling season, as well as organizing the other managers.

REFERENCES

Craig A. Shue	WPI Associate Professor and SFS Principal Investigator Phone: (508) 831 – 7933 E-Mail: cshue@wpi.edu
Beckley W. Schowalter	WPI SFS Program Manager Phone: (508) 831 – 6018 E-Mail: bwschowalter@wpi.edu

Continued...

Bruce Lambert Air Force PCIP Supervisor
E-Mail: bruce.lambert.4@us.af.mil

Eitan R. Check The MITRE Corporation Internship Supervisor
E-Mail: echeck@mitre.org

“I certify that, to the best of my knowledge and belief, all of my statements are true, correct, complete, and made in good faith.” - Nicole Conill, October 13, 2022