NCL Spring 2022 Team Game Scouting Report

Dear Nehemjit Rai (Team "MacSec@MacEwan"),

Thank you for participating in the National Cyber League (NCL) 2022 Spring Season! Our goal is to prepare the next generation of cybersecurity professionals, and your participation is helping achieve that goal.

The NCL was founded in May 2011 to provide an ongoing virtual training ground for collegiate students to develop, practice, and validate their cybersecurity skills in preparation for further learning, industry certifications, and career readiness. The NCL scenario-based challenges were designed around performance-based exam objectives of CompTIA certifications and are aligned to the National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework published by the National Institute of Standards and Technology (NIST).

As you look to a future career in cybersecurity, we hope you find this report to be valuable in both validating skills and identifying areas for improvement across the nine NCL skills categories. You can use this NCL Scouting Report to:

- Validate your skills to employers in any job application or professional portfolio;
- Show case your achievements and strengths by including the Score Card view of your performance as part of your résumé or simply sharing the validation link so that others may view the detailed version of this report.

The NCL 2022 Spring Season had 6,610 students/players and 468 faculty/coaches from more than 500 two- and fouryear schools & 80 high schools across all 50 U.S. states registered to play. The Individual Game Capture the Flag (CTF) event took place from April 8 through April 10. The Team Game CTF event took place from April 22 through April 24. The games were conducted in real-time for students across the country.

NCL is powered by Cyber Skyline's cloud-based skills evaluation platform. Cyber Skyline hosted the scenario-driven cybersecurity challenges for players to compete and track their progress in real-time.

To validate this report, please access: cyberskyline.com/report/K487EB7GXJQW



Based on the the performance detailed in this NCL Scouting Report, you have earned 17 hours of CompTIA. Continuing Education Units (CEUs) as approved by CompTIA. You can learn more about the NCL -CompTIA alignment via nationalcyberleague.org/comptia.

Congratulations for your participation in the NCL 2022 Spring Team Game! We hope you will continue to develop your knowledge and skills and make meaningful contributions as part of the Information Security workforce!

David Zeichick **NCL** Commissioner



NATIONAL CYBER LEAGUE SCORE CARD

NCL 2022 SPRING TEAM GAME

NATIONAL RANK 20TH PLACE OUT OF 3658 PERCENTILE 100TH

WEB APPLICATION FORENSICS EXPLOITATION 100TH PERCENTILE 100TH PERCENTILE 100TH PERCENTILE



CYBER SKYLINE

cyberskyline.com/report ID: K487EB7GXJQW

YOUR TOP CATEGORIES



NCL Spring 2022 Team Game

The NCL Team Game is designed for student players nationwide to compete in realtime in the categories listed below. The Team Game promotes camaraderie and evaluates the collective technical cybersecurity skills of the team members.

20 TH PLACE OUT OF 3658 NATIONAL RANK

82.9%



100th National Percentile

100	Percentile	Average: 876.5 Points	Average: 60.8%	Average: 35.7%				
Crypt	ography	245	POINTS 91.7 OUT OF 345 ACCUR		ETION: 91.7%			
-	echniques used to encrypt one plaintext.	r obfuscate messages and levera		ACT				
Enum	neration & Exploi	tation 335	POINTS 100.		ETION: 94.1%			
-	ctionable exploits and vulne measures in code and comp	rabilities and use them to bypass iled binaries.	the					
Forer	nsics	280	POINTS 87.5		ETION: 93.3%			
	e proper tools and technique te digital evidence in a comp	es to analyze, process, recover, an outer-related incident.	d/or					
Log A	analysis	200	POINTS 72.2 OUT OF 300 ACCUR		ETION: 61.9%			
Utilize the proper tools and techniques to establish a baseline for normal operation and identify malicious activities using log files from various services.								
Netw	ork Traffic Analy	sis 325	POINTS 64.5 OUT OF 345 ACCUR		ETION: 95.2%			
-	nalicious and benign networ security breaches.	k traffic to demonstrate an under						
Open	Source Intelliger	ance 300	POINTS 85.0 OUT OF 300 ACCUR		ETION: 100.0%			
	*	such as search engines, public re oth knowledge on a topic or targe						
Pass	word Cracking	260	POINTS OUT OF 340 ACCUR		ETION: 91.7%			
	ypes of password hashes ar e plaintext passwords.	nd apply various techniques to eff	iciently					
Scani	ning & Reconnais	ssance 300	POINTS 85.7 OUT OF 300 ACCUR		ETION: 100.0%			
-	and use the proper tools to grand potential vulnerabilities.	ain intelligence about a target inc						
Web	Application Expl	pitation 200	POINTS 75.0 OUT OF 300 ACCUR		ETION: 75.0%			
Identify a	ctionable exploits and vulne	rabilities and use them to bypass						

Note: Survey module (100 points) was excluded from this report.





Cryptography Module

Identify techniques used to encrypt or obfuscate messages and leverage tools to extract the plaintext.

63 RD PLACE OUT OF 3658 NATIONAL RANK

245 POINTS OUT OF 345

91.7% ACCURACY 91.7% COMPLETION

Security Control Assessor Secure Software Assessor Exploitation Analyst Cyber Operator Security Architect

99th National Percentile

Average: 116.7 Points

Average: 74.2%

Average: 55.7%

Decoding 1 (Easy)	20 POINTS OUT OF 20	100.0% ACCURACY	COMPLETION:	100.0%
Decoding 2 (Easy)	20 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	100.0%
Decoding 3 (Medium)	35 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	100.0%
Decoding 4 (Medium)	45 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	100.0%
Decoding 5 (Hard)	O POINTS OUT OF 100	0.0% ACCURACY	COMPLETION:	0.0%
Stego (Medium)	50 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	100.0%
Signature (Hard)	75 POINTS OUT OF 75	66.7% ACCURACY	COMPLETION:	100.0%



Enumeration & Exploitation Module

Identify actionable exploits and vulnerabilities and use them to bypass the security measures in code and compiled binaries.

27 TH PLACE OUT OF 3658 NATIONAL RANK 335 POINTS OUT OF 370 PERFORMANCE SCORE

100.0% ACCURACY 94.1% COMPLETION

Average: 35.1%

COMPLETION:

Cyber Operator Target Developer Exploitation Analyst Software Developer Systems Security Analyst

100.0%

100th National

Average: 99.4 Points

Average: 60.9%

Secure Server (Easy)

90 POINTS OUT OF

100.0% ACCURACY 100.0%

COMPLETION: 100.0%

dSafe (Medium)

100 POINTS OUT OF

100.0% ACCURACY

ACCURACY

COMPLETION: 100.0%

Speedy (Hard)

Hidden (Hard)

65 POINTS

100.0% ACCURACY COMPLETION: 83.3%

Forensics Module

Utilize the proper tools and techniques to analyze, process, recover, and/or investigate digital evidence in a computer-related incident.

15 TH PLACE OUT OF 3658 NATIONAL RANK 280 POINTS OUT OF 300 PERFORMANCE SCORE

87.5% ACCURACY 93.3% COMPLETION

Average: 36.8%

COMPLETION:

Cyber Defense Forensics Analyst Cyber Crime Investigator Cyber Defense Incident Responder Cyber Defense Analyst

100th National Percentile

Leaky (Easy)

Average: 154.7 Points

7 Points

, worage: 00.

COMPLETION: 100.0%

Registry (Medium)

100 POINTS

100 POINTS OUT OF

100.0% ACCURACY 100.0%

Dump (Hard)

 $80^{\frac{\text{POINTS}}{\text{OUT OF}}}_{\text{100}}$

77.8% ACCURACY COMPLETION: 87.5%



Log Analysis Module

Utilize the proper tools and techniques to establish a baseline for normal operation and identify malicious activities using log files from various services.

64 TH PLACE OUT OF 3658 NATIONAL RANK

ERFORMANCE SCORE

72.2%



COMPLETION:

COMPLETION:

Cyber Defense Analyst Systems Security Analyst All-Source Analyst Cyber Defense Forensics Analyst Data Analyst

100.0%

0.0%

99th National Percentile

Average: 106.5 Points

Average: 41.0%

Entertainment (Easy)

100 POINTS OUT OF

100 POINTS OUT OF

77.8% ACCURACY

66.7% ACCURACY

COMPLETION: 100.0%

Eventful (Medium)

Oddball (Hard)

O POINTS OUT OF

0.0% **ACCURACY**

Network Traffic Analysis Module

Identify malicious and benign network traffic to demonstrate an understanding of potential security breaches.

TH PLACE OUT OF 3658 NATIONAL RANK

64.5% ACCURACY



COMPLETION:

COMPLETION:

Cyber Defense Analyst All-Source Analyst Cyber Defense Incident Responder Target Network Analyst Cyber Operator

99th National Percentile

Average: 138.6 Points

Average: 48.6%

Shell (Easy)

100.0% ACCURACY

COMPLETION: 100.0%

Corp Net (Medium)

35.7% ACCURACY 83.3%

Wifi Cracking (Medium)

75 POINTS OUT OF 100.0% **ACCURACY**

100.0%

Stream (Hard)

100 POINTS OUT OF

75.0% ACCURACY COMPLETION: 100.0%



Open Source Intelligence Module

Utilize publicly available information such as search engines, public repositories, social media, and more to gain in-depth knowledge on a topic or target.

6 TH PLACE OUT OF 3658

PERFORMANCE SCORE

85.0% ACCURACY



Systems Security Analyst Target Developer System Administrator Research & Development Specialist Cyber Intel Planner

NATIONAL RANK

Percentile

99th National

Average: 182.7 Points

Average: 63.1%

Rules of Conduct (Easy)	25 POINTS OUT OF 25	83.3% ACCURACY	COMPLETION:	100.0%			
Blockchain (Easy)	65 POINTS OUT OF	71.4% ACCURACY	COMPLETION:	100.0%			
Use online resources to identify stolen funds on the blockchain							
Banking (Medium)	50 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	100.0%			
License (Medium)	60 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	100.0%			
Rendezvous (Hard)	100 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	100.0%			



Password Cracking Module

Identify types of password hashes and apply various techniques to efficiently determine plaintext passwords.

TH PLACE NATIONAL RANK

Cracking 2 (Easy)

Cracking 3 (Easy)

Crack Windows NTLM password hashes

Cracking 4 (Medium)

Cracking 5 (Medium)

Cracking 6 (Hard)

Zip (Medium)

PERFORMANCE SCORE

95.7% ACCURACY

Average: 88.2%

91.7% COMPLETION Average: 58.5%

COMPLETION:

COMPLETION:

COMPLETION:

COMPLETION:

Cyber Operator **Exploitation Analyst** Systems Security Analyst Cyber Defense Incident Responder Cyber Crime Investigator

97th National

Average: 157.3 Points

30 POINTS OUT OF Crack MD5 password hashes from a known wordlist

100.0% **ACCURACY**

100.0% **ACCURACY**

100.0%

ACCURACY

ACCURACY

75.0%

100.0% **ACCURACY**

100.0% **ACCURACY**

Cracking 1 (Easy)

Extract and crack a wordpress admin password from a database dump

Build a wordlist to crack passwords following a specific pattern

Build a wordlist to crack passwords not found in common wordlists

Crack SHA1 password hashes from a known wordlist

30 POINTS OUT OF

100.0%

COMPLETION:

COMPLETION:

COMPLETION:

100.0%

71.4%

100.0%

100.0%

100.0%

100.0%

100.0%

Crack the password of a ZIP archive file



Scanning & Reconnaissance Module

Identify and use the proper tools to gain intelligence about a target including its services and potential vulnerabilities.

4 TH PLACE OUT OF 3658

ERFORMANCE SCORE

85.7% ACCURACY

100.0% COMPLETION Average: 36.7%

COMPLETION:

Vulnerability Assessment Analyst Target Network Analyst Cyber Operations Planner Target Developer Security Control Assessor

100.0%

NATIONAL RANK

100th National Percentile

Average: 125.7 Points

Average: 62.9%

Seeking (Easy)

Public (Medium)

Key (Hard)

100 POINTS OUT OF

100 POINTS OUT OF

100 POINTS OUT OF

100.0%

ACCURACY

100.0% ACCURACY

66.7%

COMPLETION: 100.0% COMPLETION: 100.0%

Web Application Exploitation Module

Identify actionable exploits and vulnerabilities and use them to bypass the security measures in online services.

3 TH PLACE OUT OF 3658 NATIONAL RANK

PERFORMANCE SCORE

75.0% COMPLETION

Average: 25.7%

Cyber Operator Software Developer **Exploitation Analyst** Systems Security Analyst Database Administrator

100.0%

0.0%

100th National Percentile

Average: 43.6 Points

75.0% ACCURACY

100.0%

Average: 58.2%

ACCURACY 0.0%

ACCURACY

COMPLETION:

COMPLETION:

Search (Hard)

Travel Agency (Medium)

Net Admin (Easy)

100 POINTS OUT OF

 $100^{\frac{\text{POINTS}}{\text{OUT OF}}}$

66.7%

COMPLETION: 100.0%