Thomas Weis
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NCL Spring 2024 Team Game Scouting Report

Dear Thomas Weis (Team "Cybertiger"),

Thank you for participating in the National Cyber League (NCL) Spring 2024 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 Spring 2024 Season had 8,020 students/players and 584 faculty/coaches from more than 480 two- and four-year schools & 240 high schools across all 50 U.S. states registered to play. The Individual Game Capture the Flag (CTF) event took place from April 5 through April 7. The Team Game CTF event took place from April 19 through April 21. 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/CKPCQVEKH1V8

Congratulations for your participation in the NCL Spring 2024 Team Game! We hope you will continue to develop your knowledge and skills and make meaningful contributions as part of the Information Security workforce!

Dr. David Zeichick
NCL Commissioner

POWERED BY CYBER SKYLINE

NATIONAL CYBER LEAGUE SCORE CARD

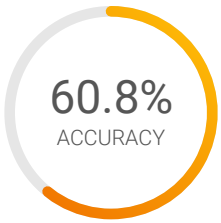
NCL SPRING 2024 TEAM GAME

NATIONAL RANK
335TH PLACE OUT OF 4199

PERCENTILE
93RD

YOUR TOP CATEGORIES

OPEN SOURCE INTELLIGENCE	ENUMERATION & EXPLOITATION	CRYPTOGRAPHY
97TH PERCENTILE	94TH PERCENTILE	93RD PERCENTILE



Average: 65.4%

cyberskyline.com/report
ID: CKPCQVEKH1V8

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NCL Spring 2024 Team Game

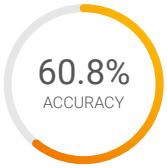
The NCL Team Game is designed for student players nationwide to compete in realtime in the categories listed below. The Team Game promotes camaraderie and evaluates the collective technical cybersecurity skills of the team members.

335 TH PLACE OUT OF 4199
NATIONAL RANK

1420 POINTS OUT OF 3000
PERFORMANCE SCORE

93rd National Percentile

Average: 1074.1 Points



Average: 65.4%

Average: 40.2%

Cryptography

145 POINTS OUT OF 345

100.0% ACCURACY

COMPLETION: 81.8%

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

Enumeration & Exploitation

200 POINTS OUT OF 300

50.0% ACCURACY

COMPLETION: 75.0%

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

Forensics

80 POINTS OUT OF 300

100.0% ACCURACY

COMPLETION: 25.0%

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

Log Analysis

155 POINTS OUT OF 415

61.5% ACCURACY

COMPLETION: 47.1%

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

Network Traffic Analysis

200 POINTS OUT OF 300

50.0% ACCURACY

COMPLETION: 64.7%

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

Open Source Intelligence

325 POINTS OUT OF 325

92.3% ACCURACY

COMPLETION: 100.0%

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

Password Cracking

95 POINTS OUT OF 300

88.9% ACCURACY

COMPLETION: 30.8%

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

Scanning & Reconnaissance

110 POINTS OUT OF 300

25.0% ACCURACY

COMPLETION: 35.7%

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

Web Application Exploitation

10 POINTS OUT OF 315

50.0% ACCURACY

COMPLETION: 11.1%

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

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

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Cryptography Module

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

304 TH PLACE OUT OF 4199
NATIONAL RANK

145 POINTS OUT OF 345
PERFORMANCE SCORE

100.0% ACCURACY

81.8% COMPLETION

93rd National Percentile

Average: 132.3 Points

Average: 74.5%

Average: 64.7%

Decoding 1 (Easy)

45 POINTS OUT OF 45

100.0% ACCURACY

COMPLETION: 100.0%

Analyze and obtain plaintext from messages encrypted with a shift cipher

Decoding 2 (Easy)

50 POINTS OUT OF 50

100.0% ACCURACY

COMPLETION: 100.0%

Analyze and obtain plaintext from messages encoded with common number bases

Decoding 3 (Medium)

50 POINTS OUT OF 50

100.0% ACCURACY

COMPLETION: 100.0%

Analyze and obtain plaintext from messages encrypted with the Rail Fence transposition cipher

Secure Communication (Medium)

0 POINTS OUT OF 100

0.0% ACCURACY

COMPLETION: 0.0%

Decrypt and encrypt PGP messages using the provided public and private keys

Message (Hard)

0 POINTS OUT OF 100

0.0% ACCURACY

COMPLETION: 0.0%

Analyze and decode a message by using frequency analysis

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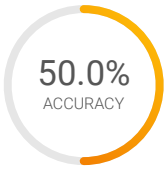
Enumeration & Exploitation Module

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

290 TH PLACE OUT OF 4199
NATIONAL RANK

200 POINTS OUT OF 300
PERFORMANCE SCORE



94th National Percentile

Average: 122.3 Points

Average: 61.4%

Average: 56.6%

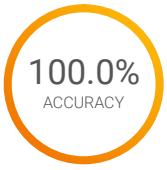
Gopher (Easy)	100 POINTS OUT OF 100	66.7% ACCURACY	COMPLETION: 100.0%
Analyze Go source code to exploit an insecurely-stored secret that uses an XOR cipher			
Drop (Medium)	100 POINTS OUT OF 100	44.4% ACCURACY	COMPLETION: 100.0%
Analyze a sample of malware written in Powershell to identify its behavior			
Playground (Hard)	0 POINTS OUT OF 100	0.0% ACCURACY	COMPLETION: 0.0%
Exploit a binary program by using ROP gadgets and stack pivoting to gain command execution			

Forensics Module

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

441 ST PLACE OUT OF 4199
NATIONAL RANK

80 POINTS OUT OF 300
PERFORMANCE SCORE



90th National Percentile

Average: 126.7 Points

Average: 67.6%

Average: 51.4%

Filesystem (Easy)	80 POINTS OUT OF 100	100.0% ACCURACY	COMPLETION: 50.0%
Analyze a filesystem image and utilize forensic tools to extract a sensitive file			
Word (Medium)	0 POINTS OUT OF 100	0.0% ACCURACY	COMPLETION: 0.0%
Extract hidden data from Word documents and reassemble the data to form a viewable image			
Analog (Hard)	0 POINTS OUT OF 100	0.0% ACCURACY	COMPLETION: 0.0%
Recover an image by programmatically converting raw VGA voltages to RGB pixel values			

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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.

386 TH PLACE OUT OF 4199
NATIONAL RANK

155 POINTS OUT OF 415
PERFORMANCE SCORE

61.5% ACCURACY

47.1% COMPLETION

91 st National Percentile

Average: 205.9 Points

Average: 44.2%

Average: 52.8%

Secure Shell (Easy)	60 POINTS OUT OF 100	50.0% ACCURACY	COMPLETION: 60.0%
Analyze a SSH server log to identify compromise attempts from threat actors			
NASA Servers (Medium)	25 POINTS OUT OF 145	66.7% ACCURACY	COMPLETION: 25.0%
Analyze a web server log and identify traffic patterns			
Employee Access (Hard)	70 POINTS OUT OF 170	75.0% ACCURACY	COMPLETION: 75.0%
Analyze data transfer logs to find anomalies and identify an insider threat			

Network Traffic Analysis Module

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

391 ST PLACE OUT OF 4199
NATIONAL RANK

200 POINTS OUT OF 300
PERFORMANCE SCORE

50.0% ACCURACY

64.7% COMPLETION

91 st National Percentile

Average: 172.2 Points

Average: 65.6%

Average: 57.6%

Announcement (Easy)	100 POINTS OUT OF 100	66.7% ACCURACY	COMPLETION: 100.0%
Analyze a network packet capture of SSDP traffic to identify devices on a network			
Wire (Medium)	100 POINTS OUT OF 100	50.0% ACCURACY	COMPLETION: 100.0%
Dissect the raw binary of an ARP packet			
Kickback (Hard)	0 POINTS OUT OF 100	0.0% ACCURACY	COMPLETION: 0.0%
Analyze the raw data from an IR remote capture to identify the behavior that occurred			

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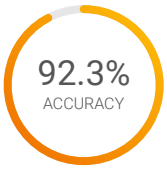
Open Source Intelligence Module

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

150 TH PLACE OUT OF 4199
NATIONAL RANK

325 POINTS OUT OF 325
PERFORMANCE SCORE



97th National Percentile

Average: 230.4 Points

Average: 77.0%

Average: 82.8%

Rules of Conduct (Easy)

25 POINTS OUT OF 25

100.0% ACCURACY

COMPLETION: 100.0%

Introductory challenge on acceptable conduct during NCL

Lucky Charms (Easy)

100 POINTS OUT OF 100

75.0% ACCURACY

COMPLETION: 100.0%

Locate a physical location by performing conversions between different coordinate systems

Hidden in Plain Sight (Medium)

100 POINTS OUT OF 100

100.0% ACCURACY

COMPLETION: 100.0%

Utilize open source tools to identify and decode a message encoded using an esoteric language

Lost (Hard)

100 POINTS OUT OF 100

100.0% ACCURACY

COMPLETION: 100.0%

Utilize open source tools to perform an analysis on a slightly redacted photo and geolocate the subject of the image

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Password Cracking Module

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

368 TH PLACE OUT OF 4199
NATIONAL RANK

95 POINTS OUT OF 300
PERFORMANCE SCORE

88.9% ACCURACY
Average: 86.4%

30.8% COMPLETION
Average: 33.0%

92nd National Percentile
Average: 107.7 Points

Hashing (Easy)

30 POINTS OUT OF 30
100.0% ACCURACY
COMPLETION: 100.0%

Generate password hashes for MD4, MD5, SHA512

Rockyou (Easy)

45 POINTS OUT OF 45
75.0% ACCURACY
COMPLETION: 100.0%

Crack SHA1 password hashes for password found in the rockyou breach

Defaults (Medium)

20 POINTS OUT OF 100
100.0% ACCURACY
COMPLETION: 20.0%

Build a custom wordlist to crack passwords not found in common wordlists

DOCX (Medium)

0 POINTS OUT OF 45
0.0% ACCURACY
COMPLETION: 0.0%

Crack the password for a protected Microsoft Word file

Fantasy (Hard)

0 POINTS OUT OF 80
0.0% ACCURACY
COMPLETION: 0.0%

Build a custom wordlist to crack passwords not found in common wordlists and augment with rules for special characters

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Scanning & Reconnaissance Module

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

345 TH PLACE OUT OF 4199
NATIONAL RANK

110 POINTS OUT OF 300
PERFORMANCE SCORE

25.0% ACCURACY

35.7% COMPLETION

92nd National Percentile

Average: 140.5 Points

Average: 60.0%

Average: 48.3%

Blocked (Easy)

60 POINTS OUT OF 100

33.3% ACCURACY

COMPLETION: 60.0%

Conduct reconnaissance on a server by identifying blocked IPs and ports

Scan (Medium)

50 POINTS OUT OF 100

22.2% ACCURACY

COMPLETION: 50.0%

Perform a UDP port scan and identify services running on a remote host

Paper (Hard)

0 POINTS OUT OF 100

0.0% ACCURACY

COMPLETION: 0.0%

Conduct reconnaissance on an LDAP server to identify the users within an organization

Web Application Exploitation Module

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

348 TH PLACE OUT OF 4199
NATIONAL RANK

10 POINTS OUT OF 315
PERFORMANCE SCORE

50.0% ACCURACY

11.1% COMPLETION

92nd National Percentile

Average: 75.7 Points

Average: 50.1%

Average: 29.3%

Jojamart (Easy)

10 POINTS OUT OF 100

50.0% ACCURACY

COMPLETION: 50.0%

Identify and exploit a SQL injection vulnerability to gain unauthorized access to sensitive data

Records (Medium)

0 POINTS OUT OF 100

0.0% ACCURACY

COMPLETION: 0.0%

Conduct an automated attack to crawl a web server and obtain sensitive information

File Share (Hard)

0 POINTS OUT OF 115

0.0% ACCURACY

COMPLETION: 0.0%

Identify and exploit a NoSQL injection vulnerability to gain unauthorized access to a web server database