

NCL Spring 2025 Individual Game Scouting Report

Dear Chris Seager,

Thank you for participating in the National Cyber League (NCL) Spring 2025 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 2025 Season had 9,216 students/players and 596 faculty/coaches from 510 two- and four-year schools & 288 high schools across all 50 U.S. states registered to play. The Individual Game Capture the Flag (CTF) event took place from April 11 through April 13. The Team Game CTF event took place from April 25 through April 27. 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/XWQ5EY2KAY3A



Based on the performance detailed in this NCL Scouting Report, you have earned 9 hours of CompTIA. Continuing Education Units (CEUs) as approved by CompTIA. You can learn more about the NCL -CompTIA alignment via nationalcyberleague.org/partners.

Congratulations for your participation in the NCL Spring 2025 Individual 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



NATIONAL CYBER LEAGUE SCORE CARD

NCL SPRING 2025 INDIVIDUAL GAME

NATIONAL RANK 627TH PLACE OUT OF 8573 PERCENTILE 93RD

LOG ANALYSIS 97TH PERCENTILE

YOUR TOP CATEGORIES

95TH PERCENTILE

94TH PERCENTILE

71.5% ACCURACY

Average: 66.8%

cyberskyline.com/report ID: XWQ5EY2KAY3A



NCL Spring 2025 Individual Game

The NCL Individual Game is designed for student players nationwide to compete in realtime in the categories listed below. The Individual Game evaluates the technical cybersecurity skills of the individual, without the assistance of others.

TH PLACE





93rd National

Average: 995.3 Points

Average: 66.8%

Average: 37.7%

Cryptography	190 POINTS OUT OF 385	92.3% ACCURACY	COMPLETION:	63.2%
Identify techniques used to encrypt or obfuscate messa extract the plaintext.	ages and leverage tools to			
Enumeration & Exploitation	175 POINTS OUT OF 365	70.6% ACCURACY	COMPLETION:	63.2%
Identify actionable exploits and vulnerabilities and use t security measures in code and compiled binaries.	hem to bypass the			
Forensics	220 POINTS OUT OF 305	50.0% ACCURACY	COMPLETION:	71.4%
Utilize the proper tools and techniques to analyze, proceinvestigate digital evidence in a computer-related incide				
Log Analysis	300 POINTS OUT OF	53.1% ACCURACY	COMPLETION:	100.0%
Utilize the proper tools and techniques to establish a ba operation and identify malicious activities using log files				
Network Traffic Analysis	160 POINTS OUT OF	56.3% ACCURACY	COMPLETION:	75.0%
Identify malicious and benign network traffic to demons potential security breaches.	strate an understanding of	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Open Source Intelligence	210 POINTS OUT OF 310	82.4% ACCURACY	COMPLETION:	77.8%
Utilize publicly available information such as search eng social media, and more to gain in-depth knowledge on a				
Password Cracking	250 POINTS OUT OF 335	100.0% ACCURACY	COMPLETION:	73.7%
Identify types of password hashes and apply various tedetermine plaintext passwords.	chniques to efficiently	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Scanning & Reconnaissance	280 POINTS OUT OF 300	80.0% ACCURACY	COMPLETION:	94.1%
Identify and use the proper tools to gain intelligence above services and potential vulnerabilities.	out a target including its			
Web Application Exploitation	130 POINTS OUT OF	75.0% ACCURACY	COMPLETION:	33.3%

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.

 $1062\,{}^{\text{ND PLACE}}_{\text{OUT OF 8573}}$

190 POINTS OUT OF 385 PERFORMANCE SCORE 92.3% ACCURACY 63.2% COMPLETION

88th National Percentile

Average: 143.1 Points

Average: 65.0%

Average: 44.2%

The Bases (Easy)	15 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	33.3%		
Analyze and obtain the plaintext from messages encode bases	ed with common number	AGGOIVIGT				
Super Shifty (Easy)	55 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	100.0%		
Analyze and obtain the plaintext for a message encrypte	ed with a shift cipher	, 1000111101				
Pizza Time (Easy)	20 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	50.0%		
Analyze and obtain the plaintext for a message encrypte cipher	ed with the rail fence					
Signed (Medium)	45 POINTS OUT OF	100.0%	COMPLETION:	75.0%		
Identify tampered files by verifying PGP signatures		, 1000111101				
Altered Clouds (Medium)	55 POINTS OUT OF	80.0%	COMPLETION:	100.0%		
Verify the integrity of files by computing HMAC values						
Zugzwang (Medium)	OUT OF	0.0% ACCURACY	COMPLETION:	0.0%		
Decode a hidden file by implementing a decoder for a custom encoding scheme						
Kracken (Hard)	OUT OF	0.0% ACCURACY	COMPLETION:	0.0%		
Break XOR encryption using a bruteforce attack with a known crib						



Enumeration & Exploitation Module

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

85 TH PLACE OUT OF **8573** NATIONAL RANK

PERFORMANCE SCORE





94th National Percentile

Average: 111.7 Points

Average: 67.9%

Average: 41.6%

Not Affine (Easy)	75 POINTS OUT OF 75	85.7%	COMPLETION:	100.0%		
Perform code analysis on C source code to reverse a se	eries of bitwise operations					
CrackMe (Medium)	25 POINTS OUT OF	66.7% ACCURACY	COMPLETION:	50.0%		
Perform static analysis on a binary program and extract an image encoded within the binary						
Hardware Discovery (Hard)	25 POINTS OUT OF	33.3% ACCURACY	COMPLETION:	25.0%		
Follow a hardware schematic to interpret raw signal data that is encoded using pulse width modulation						
Escalate (Hard)	50 POINTS OUT OF	75.0% ACCURACY	COMPLETION:	60.0%		

Identify and exploit a vulnerability in a compiled C binary to read data from unclosed file descriptors



Forensics Module

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

5 TH PLACE **OUT OF 8573**

50.0% ACCURACY



92nd National

Average: 144.7 Points

Average: 58.4%

Average: 48.4%

Overused (Easy)	70 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	66.7%	
Use Binwalk or other file carving tools to analyze and e	extract embedded files				
Oops (Medium)	100 POINTS OUT OF	33.3% ACCURACY	COMPLETION:	100.0%	
Utilize forensics tools to perform file recovery on a deleted image					
Absence (Hard)	50 POINTS OUT OF 100	50.0%	COMPLETION:	50.0%	

Recover a corrupted G-code file by correcting errors and fixing gaps within the file

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.

NATIONAL RANK

Ancient History (Easy)

PERFORMANCE SCORE

53.1% ACCURACY



COMPLETION:

97th National Percentile

Average: 164.5 Points

Average: 56.8%

100 POINTS OUT OF Analyze HTTP access logs to calculate statistics and identify trends in web traffic

Leaked (Medium)

71.4% ACCURACY

77.8%

ACCURACY

COMPLETION: 100.0%

100.0%

Analyze a SQL backup log file and calculate statistics on user data

Logins (Hard)

31.3%

COMPLETION: 100.0%

Parse a binary log and perform anomaly detection to identify a compromised user based on GeoIP data





Network Traffic Analysis Module

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

1377 TH PLACE OUT OF 8573

160 POINTS OUT OF 300 PERFORMANCE SCORE

56.3% ACCURACY



84th National Percentile

Average: 124.6 Points

Average: 66.3%

Average: 56.9%

Lost in Resolution (Easy)	80 POINTS OUT OF	45.5% ACCURACY	COMPLETION:	83.3%	
Analyze a packet capture with DNS traffic to identify DN	S queries and responses				
Wifi (Medium)	80 POINTS OUT OF 100	80.0% ACCURACY	COMPLETION:	80.0%	
Analyze a packet capture of WiFi network traffic and crack the password to the WiFi network					
Exfil (Hard)	O POINTS OUT OF 100	0.0% ACCURACY	COMPLETION:	0.0%	
		71000117101			

Analyze a packet capture to identify and extract exfiltrated data that was encoded within x.509 certificate SAN fields



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.

1881 ST PLACE OUT OF 8573

T OF 8573 210 out of 310 out of 3

82.4% ACCURACY



79th National Percentile

Average: 196.4 Points

Average: 70.9%

Average: 66.8%

Rules of Conduct (Easy)	100 POINTS OUT OF	100.0%	COMPLETION:	100.0%		
Introductory challenge on acceptable conduct during NC	L	7.000.0.0				
Honor (Easy)	30 POINTS OUT OF 30	100.0% ACCURACY	COMPLETION:	100.0%		
Analyze an image to obtain data from metadata and file p	properties					
Controversial Challenge (Medium	1) 30 POINTS OUT OF	66.7% ACCURACY	COMPLETION:	100.0%		
Perform a reverse image search to discover open-source information about a subject						
Nostalgia (Hard)	20 POINTS OUT OF	50.0% ACCURACY	COMPLETION:	66.7%		
Utilize open source tools to analyze and geolocate a photo						
Meow Meow (Hard)	O POINTS OUT OF	0.0% accuracy	COMPLETION:	0.0%		
Extract an image from an EML file and then perform a reverse image search to discover information about a target						
GitHub in Action (Hard)	30 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	66.7%		

Investigate public GitHub repositories to trace connections between user actions and their social media accounts





Password Cracking Module

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

466 TH PLACE OUT OF 8573

250 POINTS OUT OF 335

100.0% ACCURACY



95th National Percentile

Average: 165.3 Points

Average: 86.9%

Average: 50.0%

Hash me outside! (Easy)	50 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	100.0%		
Generate password hashes using MD5, SHA1, and SHA:	256	7,00010,101				
We Will Rockyou (Easy)	50 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	100.0%		
Crack MD5 password hashes for password found in the	RockYou breach					
Oph the Grid (Medium)	50 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	100.0%		
Crack Windows NTLM password hashes using rainbow tables						
Totally Safe PDF (Medium)	50 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	100.0%		
Crack the insecure password on a protected PDF file						
put 0n th3 ma5k (Medium)	50 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	100.0%		
Build a wordlist or pattern rule to crack password hashes of a known pattern						
Dice (Hard)	O POINTS OUT OF 85	0.0% accuracy	COMPLETION:	0.0%		

Build a custom wordlist to crack passwords by augmenting permutation rules using known password complexity requirements





Scanning & Reconnaissance Module

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

53 RD PLACE OUT OF 8573 NATIONAL RANK

80.0% ACCURACY



94th National

Average: 171.8 Points

Average: 72.8%

Average: 54.2%

COMPLETION: 100.0% Portscan (Easy) 80.0% Perform a port scan and identify services running on a remote host Dig (Medium) COMPLETION: 100.0% 77.8% Utilize DNS services to gain information about an organization's Intranet COMPLETION: 83.3% School Directory (Hard) 83.3%

Conduct reconnaissance on an LDAP server

Web Application Exploitation Module

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

ST PLACE OUT OF 8573 NATIONAL RANK

PERFORMANCE SCORE

75.0%



90th National Percentile

Average: 123.1 Points

Average: 61.9%

Average: 39.4%

COMPLETION: Liber8Dogs (Easy) 100.0% 100.0% Find and exploit a path traversal vulnerability in a web application COMPLETION: 33.3% Liber8tion_Login (Medium) 50.0%

Manipulate headers to exploit improper authorization checks in middleware found in CVE-2025-29927

COMPLETION: 0.0% 0.0% dogstagram (Hard) **ACCURACY**

Bypass data sanitization on a login form and exploit a server side request forgery vulnerability