

NCL Spring 2025 Team Game Scouting Report

Dear Simon Chu (Team "Palomar Cyber Comets team A"),

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/U3Q98591XPJR

Congratulations for your participation in the NCL Spring 2025 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



NATIONAL CYBER LEAGUE SCORE CARD

NCL SPRING 2025 TEAM GAME

NATIONAL RANK
228TH PLACE
OUT OF 4779
PERCENTILE
96TH

ENUMERATION &
EXPLOITATION
98TH PERCENTILE

YOUR TOP CATEGORIES

CRYPTOGRAPHY 97TH PERCENTILE

OPEN SOURCE INTELLIGENCE 97TH PERCENTILE



Average: 55.4%

cyberskyline.com/report ID: U3Q98591XPJR



NCL Spring 2025 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.

228 TH PLACE OUT OF 4779

1700 POINTS OUT OF 3000 PERFORMANCE SCORE





96th National Percentile

Average: 989.7 Points

Average: 55.4%

Average: 42.7%

Cryptography	195 POINTS OUT OF 325	40.0% ACCURACY	COMPLETION:	82.4%
Identify techniques used to encrypt or obfuscate mes extract the plaintext.	sages and leverage tools to	7.0001V.01		
Enumeration & Exploitation	260 POINTS OUT OF 380	77.8% ACCURACY	COMPLETION:	87.5%
Identify actionable exploits and vulnerabilities and use security measures in code and compiled binaries.	them to bypass the			
Forensics	180 POINTS OUT OF 300	70.0% ACCURACY	COMPLETION:	70.0%
Utilize the proper tools and techniques to analyze, pro investigate digital evidence in a computer-related incidence.				
Log Analysis	160 POINTS OUT OF 315	22.2% ACCURACY	COMPLETION:	57.1%
Utilize the proper tools and techniques to establish a loperation and identify malicious activities using log file				
Network Traffic Analysis	120 POINTS OUT OF 300	61.5% ACCURACY	COMPLETION:	66.7%
Identify malicious and benign network traffic to demo potential security breaches.	nstrate an understanding of	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Open Source Intelligence	270 POINTS OUT OF 350	34.3% ACCURACY	COMPLETION:	85.2%
Utilize publicly available information such as search e social media, and more to gain in-depth knowledge or				
Password Cracking	180 POINTS OUT OF 320	27.3% ACCURACY	COMPLETION:	70.6%
Identify types of password hashes and apply various determine plaintext passwords.	echniques to efficiently	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Scanning & Reconnaissance	125 POINTS OUT OF 300	50.0% ACCURACY	COMPLETION:	44.4%
Identify and use the proper tools to gain intelligence a services and potential vulnerabilities.	bout a target including its			
Web Application Exploitation	110 POINTS OUT OF 310	80.0% ACCURACY	COMPLETION:	44.4%
	and the second second			

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



Identify actionable exploits and vulnerabilities and use them to bypass the

security measures in online services.

100.0%

0.0%

The National Cyber League A Community Where Cybersecurity Is a Passion

Cryptography Module

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

53 RD PLACE OUT OF 4779

PERFORMANCE SCORE

40.0% ACCURACY



COMPLETION:

COMPLETION:

TOP NICE WORKROLES

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

NATIONAL RANK

97th National Percentile

So Basic (Easy)

For Fun (Easy)

Average: 110.6 Points

Average: 58.9%

100.0% ACCURACY 60.0%

COMPLETION: 100.0%

Decrypt messages that are encrypted using different shift ciphers

Crypto Therapy (Medium)

Decode the plaintext of messages encoded with common number bases

Exploit a poor implementation of RSA to decrypt sensitive data

12.5% ACCURACY

0.0%

ACCURACY

COMPLETION: 50.0%

Decrypt a message that was encrypted using the Skipjack cipher

Infinite Cosmic Power (Hard)

Skip To My Lou (Medium)

50.0%

COMPLETION: 85.7%

Perform a differential power attack on a power trace to obtain an AES encryption



Enumeration & Exploitation Module

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

ST PLACE OUT OF 4779 NATIONAL RANK

77.8% ACCURACY Average: 57.3%

87.5% COMPLETION Average: 50.1%

TOP NICE WORKROLES

Cyber Operator Target Developer **Exploitation Analyst** Software Developer Systems Security Analyst

98th National

Average: 132.2 Points

Ransomed (Easy)

100.0% **ACCURACY**

COMPLETION:

100.0%

Analyze source code to bypass an XOR-based authentication mechanism

Crawling (Medium)

66.7%

COMPLETION: 100.0%

Perform a privilege escalation attack by coercing a binary with elevated permissions into running untrusted software

ExploitExhibit (Hard)

100.0% ACCURACY

COMPLETION: 50.0%

Exploit a C++ program by undermining the heap memory or leaking vtable pointers

Forensics Module

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

3 TH PLACE OUT OF 4779 **TH PLACE** NATIONAL RANK

96th National

PERFORMANCE SCORE

Average: 136.7 Points

70.0% ACCURACY

Average: 56.8%

70.0% COMPLETION Average: 48.1% TOP NICE WORKROLES

Cyber Defense Forensics Analyst Cyber Crime Investigator Cyber Defense Incident

Responder Cyber Defense Analyst

Origin Story (Easy)

100 POINTS OUT OF

100.0%

COMPLETION:

100.0%

Investigate a Git repository to find leaked secrets

Ransom Residue (Medium)

57.1%

COMPLETION:

80.0%

Perform a forensic investigation of a computer that was compromised by ransomware by analyzing a disk image file

Archive (Hard)

0.0% **ACCURACY**

COMPLETION:

0.0%

Automate the extraction of files by matching file signatures in a raw byte stream





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.

5 TH PLACE OUT OF 4779

FREORMANCE SCORE

22.2%

57.1% COMPLETION Average: 53.9%

TOP NICE WORKROLES

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

NATIONAL RANK

92nd National

Average: 161.6 Points

Average: 52.2%

57.1% ACCURACY

COMPLETION:

100.0%

Analyze event logs from a Windows 7 workstation that was compromised by FternalBlue

Compromising (Medium)

What Remains (Easy)

14.8% ACCURACY COMPLETION: 66.7%

Analyze a NetFlow log to identify compromised devices and malicious behavior

Coords (Hard)

0.0% ACCURACY COMPLETION:

0.0%

Parse a custom binary file format and perform geospatial analysis of drone flight

Network Traffic Analysis Module

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

ST PLACE OUT OF 4779

NATIONAL RANK

PERFORMANCE SCORE

91 st National Percentile

Average: 147.2 Points

61.5% ACCURACY

Average: 60.6%

66.7% COMPLETION Average: 65.1% TOP NICE WORKROLES

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

HTTP Forever (Easy)

100.0%

ACCURACY

COMPLETION:

100.0%

Analyze a packet capture with HTTP traffic to identify web browsing behavior

SQL Storage Secrets (Medium)

37.5% **ACCURACY** COMPLETION: 50.0%

Analyze PostgreSQL traffic to discover information about a database and the binary content inside it

Ping of Domin8tion (Hard)

0.0% ACCURACY COMPLETION: 0.0%

Analyze a packet capture to extract an image that was exfiltrated by encoding data in ICMP packet headers





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 4779 **TH** PLACE





TOP NICE WORKROLES

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

NATIONAL RANK

97th National

Average: 181.0 Points

Rules of Conduct (Easy)	30 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	100.0%
Introductory challenge on acceptable conduct during NCL	-			
Swap (Easy)	100 POINTS OUT OF 100	39.1% ACCURACY	COMPLETION:	100.0%
Utilize blockchain tools to perform an analysis of cryptocu	urrency transactions			
Granny (Medium)	60 POINTS OUT OF	66.7% ACCURACY	COMPLETION:	100.0%
Use open source tools to find information about the subje	ect of an image			
Sla.cking (Medium)	40 POINTS OUT OF	8.3% ACCURACY	COMPLETION:	66.7%
Perform introspection on deep web forums using the Inte	rnet Archive			
Gramma Brasiliensis (Hard)	40 POINTS OUT OF	25.0% ACCURACY	COMPLETION:	40.0%

Conduct an open source investigation on an individual to create a timeline of their actions and cryptocurrency transactions





Password Cracking Module

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

388 TH PLACE OUT OF 4779

PERFORMANCE SCORE

27.3% ACCURACY



TOP NICE WORKROLES

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

NATIONAL RANK

92 nd National

Average: 151.0 Points

Average: 80.8%

Loaded Hash Browns (Easy) Generate password hashes using MD5, SHA1, and SHA256 You're So Basic (Easy) 45 POINTS OUT OF Crack MD5 password hashes for commonly used passwords

786b63642e636f6d2f393336 45 POINTS OUT OF (Medium)

Crack Windows NTLM password hashes that may not be found in common rainbow tables

Zip (Medium) Crack the insecure password for a protected zip file

Crunch Time (Medium)

Create a custom wordlist to crack passwords based on known password rules

Router (Hard)

COMPLETION: 75.0% ACCURACY

COMPLETION:

18.8% **ACCURACY**

0.0%

ACCURACY

5.3%

ACCURACY

100.0% **ACCURACY**

COMPLETION:

COMPLETION: 100.0% **ACCURACY**

COMPLETION:

COMPLETION:

0.0%

100.0%

100.0%

100.0%

100.0%

20.0%

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.

88 TH PLACE OUT OF 4779

50.0% ACCURACY

44.4% COMPLETION Average: 35.7%

TOP NICE WORKROLES

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

NATIONAL RANK

97th National

Average: 106.3 Points

Average: 46.8%

COMPLETION:

100.0%

LuckyCat (Easy)

100.0% **ACCURACY**

COMPLETION:

Schrödinger's Port (Medium)

0.0% **ACCURACY** 0.0%

Disable a local firewall and perform a port scan on an internal network

Classify malware from benign samples by creating custom Yara rules

Ephemeral (Hard)

100.0% ACCURACY

COMPLETION: 50.0%

Scan a device and perform a port knocking sequence to access a hidden service

Web Application Exploitation Module

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

TH PLACE OUT OF 4779

NATIONAL RANK

PERFORMANCE SCORE

80.0% ACCURACY

44.4% COMPLETION

Average: 35.9%

TOP NICE WORKROLES

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

94th National

Average: 96.3 Points

Average: 69.9%

66.7%

Doohickey Divulgence (Easy)

COMPLETION:

COMPLETION:

100.0%

Perform analysis on minified source code to decode and extract sensitive information

Pierre's Store (Medium)

100.0% **ACCURACY**

66.7%

Perform a SQL injection attack to leak sensitive information from a web application

Cash Rules Everything Around Me nound Me nound Me

0.0%

COMPLETION:

0.0%

Perform a series of cache deception attacks against a web application