

## NCL Spring 2025 Team Game Scouting Report

Dear Dylan Barrett (Team "WE HAVE NO IDEA WHAT WE'RE DOING"),

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/6T796N84LJE5

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
33 RD PLACE
OUT OF 4779
PERCENTILE
100TH

WEB APPLICATION
EXPLOITATION
100TH PERCENTILE

YOUR TOP CATEGORIES

CRYPTOGRAPHY
100TH PERCENTILE

OPEN SOURCE INTELLIGENCE 99TH PERCENTILE



Average: 55.4%

cyberskyline.com/report ID: 6T796N84LJE5



# 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.

RD PLACE OUT OF 4779 NATIONAL RANK 2700 POINTS OUT OF 3000 PERFORMANCE SCORE

47.7% ACCURACY



100<sup>th</sup> National Percentile

Average: 989.7 Points

Average: 55.4%

Average: 42.7%

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Cryptography	295 POINTS OUT OF 325	38.1% ACCURACY	COMPLETION:	94.1%
Identify techniques used to encrypt or obfuscate messa extract the plaintext.	ages and leverage tools to	ACCONACT		
Enumeration & Exploitation	260 POINTS OUT OF 380	58.3% ACCURACY	COMPLETION:	87.5%
Identify actionable exploits and vulnerabilities and use to security measures in code and compiled binaries.	them to bypass the			
Forensics	300 POINTS OUT OF 300	22.7% ACCURACY	COMPLETION:	100.0%
Utilize the proper tools and techniques to analyze, proceinvestigate digital evidence in a computer-related incide				
Log Analysis	295 POINTS OUT OF 315	40.6% ACCURACY	COMPLETION:	92.9%
Utilize the proper tools and techniques to establish a ba operation and identify malicious activities using log file		7.000.0.0		
Network Traffic Analysis	300 POINTS OUT OF 300	75.0% ACCURACY	COMPLETION:	100.0%
Identify malicious and benign network traffic to demonspotential security breaches.	strate an understanding of			
Open Source Intelligence	350 POINTS OUT OF 350	45.0% ACCURACY	COMPLETION:	100.0%
Utilize publicly available information such as search engocial media, and more to gain in-depth knowledge on a				
Password Cracking	320 POINTS OUT OF 320	94.4% ACCURACY	COMPLETION:	100.0%
Identify types of password hashes and apply various te determine plaintext passwords.	echniques to efficiently	7,000,000		
Scanning & Reconnaissance	200 POINTS OUT OF 300	50.0% ACCURACY	COMPLETION:	55.6%
Identify and use the proper tools to gain intelligence above services and potential vulnerabilities.	out a target including its			
Web Application Exploitation	280 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	88.9%

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





### A Community Where Cybersecurity Is a Passion

# Cryptography Module

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

5 TH PLACE OUT OF 4779

PERFORMANCE SCORE

38.1% ACCURACY

94.1% COMPLETION

TOP NICE WORKROLES

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

NATIONAL RANK

100<sup>th</sup> National Percentile

Average: 110.6 Points

Average: 58.9%

Average: 46.0%

So Basic (Easy)	45 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	100.0%			
Decode the plaintext of messages encoded with common number bases							
For Fun (Easy)	45 POINTS OUT OF	75.0% ACCURACY	COMPLETION:	100.0%			
Decrypt messages that are encrypted using different shift ciphers							
Crypto Therapy (Medium)	50 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	100.0%			
Exploit a poor implementation of RSA to decrypt sensitive data							
Skip To My Lou (Medium)	60 POINTS OUT OF	100.0% ACCURACY	COMPLETION:	100.0%			
Decrypt a message that was encrypted using the Skipjack cipher							
Infinite Cosmic Power (Hard)	95 POINTS OUT OF	19.4%	COMPLETION:	85.7%			

ACCURACY

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





### **Enumeration & Exploitation Module**

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

**TH** PLACE OUT OF 4779

58.3%

87.5% COMPLETION Average: 50.1%

COMPLETION:

TOP NICE WORKROLES

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

100.0%

NATIONAL RANK

98<sup>th</sup> National

Average: 132.2 Points

Average: 57.3%

Ransomed (Easy)

Analyze source code to bypass an XOR-based authentication mechanism

80.0%

40.0% **ACCURACY** 

Crawling (Medium)

**ACCURACY** 

COMPLETION: 100.0%

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

ExploitExhibit (Hard)

50.0% 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.

8 TH PLACE OUT OF 4779 NATIONAL RANK

PERFORMANCE SCORE

22.7% ACCURACY

100.0% COMPLETION Average: 48.1% TOP NICE WORKROLES

Cyber Defense Forensics Analyst Cyber Crime Investigator Cyber Defense Incident Responder

Cyber Defense Analyst

99th National

Average: 136.7 Points

Average: 56.8%

Origin Story (Easy)

60.0%

COMPLETION: 100.0%

Investigate a Git repository to find leaked secrets

Ransom Residue (Medium)

26.3%

COMPLETION: 100.0%

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

Archive (Hard)

10.0% ACCURACY

COMPLETION: 100.0%

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

REORMANCE SCORE

40.6% ACCURACY



#### TOP NICE WORKROLES

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

NATIONAL RANK

99th National

Average: 161.6 Points

Average: 52.2%

66.7% **ACCURACY** 

COMPLETION:

100.0%

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

Compromising (Medium)

What Remains (Easy)

54.5% ACCURACY COMPLETION: 100.0%

Analyze a NetFlow log to identify compromised devices and malicious behavior

Coords (Hard)

95 POINTS

20.0% ACCURACY COMPLETION:

75.0%

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.

2 ND PLACE OUT OF 4779 NATIONAL RANK

PERFORMANCE SCORE

75.0% ACCURACY



TOP NICE WORKROLES Cyber Defense Analyst

All-Source Analyst Cyber Defense Incident Responder Target Network Analyst

Cyber Operator

Percentile

99th National

Average: 147.2 Points

Average: 60.6%

HTTP Forever (Easy)

83.3% **ACCURACY**  COMPLETION: 100.0%

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

SQL Storage Secrets (Medium)

85.7% **ACCURACY**  COMPLETION: 100.0%

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

Ping of Domin8tion (Hard)

33.3% ACCURACY COMPLETION: 100.0%

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.

8 TH PLACE OUT OF 4779

ERFORMANCE SCORE





### TOP NICE WORKROLES

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

NATIONAL RANK

99th National

Average: 181.0 Points

Rules of Conduct (Easy) COMPLETION: 100.0% 100.0% **ACCURACY** Introductory challenge on acceptable conduct during NCL COMPLETION: 100.0% 75.0% Swap (Easy) **ACCURACY** Utilize blockchain tools to perform an analysis of cryptocurrency transactions COMPLETION: 57.1% 100.0% Granny (Medium) Use open source tools to find information about the subject of an image COMPLETION: 100.0% 42.9% Sla.cking (Medium) **ACCURACY** Perform introspection on deep web forums using the Internet Archive COMPLETION: 100.0% Gramma Brasiliensis (Hard) 17.9%

**ACCURACY** 

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.

3 RD PLACE OUT OF 4779

PERFORMANCE SCORE

94.4% ACCURACY



#### TOP NICE WORKROLES

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

NATIONAL RANK

99th National

Average: 151.0 Points

Average: 80.8%

75.0% **ACCURACY** 45 POINTS OUT OF

100.0% ACCURACY

COMPLETION:

COMPLETION:

100.0%

100.0%

Crack MD5 password hashes for commonly used passwords

Generate password hashes using MD5, SHA1, and SHA256

786b63642e636f6d2f393336 (Medium)

Loaded Hash Browns (Easy)

You're So Basic (Easy)

45 POINTS OUT OF

100.0% **ACCURACY** 

COMPLETION: 100.0%

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

Zip (Medium)

100.0% **ACCURACY** 

COMPLETION: 100.0%

Crack the insecure password for a protected zip file

Crunch Time (Medium)

100.0% **ACCURACY** 

COMPLETION: 100.0%

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

Router (Hard)

100.0% ACCURACY

COMPLETION: 100.0%

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.

**TH** PLACE OUT OF 4779 FREORMANCE SCORE

50.0% ACCURACY Average: 46.8%

55.6% COMPLETION Average: 35.7%

TOP NICE WORKROLES

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

NATIONAL RANK

98<sup>th</sup> National

Average: 106.3 Points

LuckyCat (Easy)

75.0% **ACCURACY**  COMPLETION:

100.0%

Classify malware from benign samples by creating custom Yara rules

Schrödinger's Port (Medium)

0.0% **ACCURACY**  COMPLETION: 0.0%

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

Ephemeral (Hard)

66.7%

COMPLETION: 100.0%

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

100<sup>th</sup> National Percentile

ERFORMANCE SCORE

Average: 96.3 Points

100.0% ACCURACY

Average: 69.9%

COMPLETION Average: 35.9%

88.9%

TOP NICE WORKROLES

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

Doohickey Divulgence (Easy)

100.0% ACCURACY

COMPLETION: 100.0%

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

Pierre's Store (Medium)

100.0% **ACCURACY** 

COMPLETION: 100.0%

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

Cash Rules Everything Around Me 80 POINTS

100.0%

COMPLETION: 75.0%

Perform a series of cache deception attacks against a web application