



NCL Spring 2021 Individual Game Scouting Report

Dear Ryan Pearson,

Congratulations on a great NCL 2021 Spring Individual Game!

National Cyber League (NCL)

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. The NCL is a next-generation learning and gaming environment using high-fidelity and scenario-based challenges from Cyber Skyline. The challenges are designed around industry recognized and performance-based exam objectives to further develop student skills. If you have any questions regarding the information in this report please inquire at info@nationalcyberleague.org.

NCL 2021 Spring Season

The NCL 2021 Spring Season was designed to develop and validate player knowledge and skills in preparation for further learning, career readiness, industry certifications, and other cybersecurity competitions. The games were designed around performance-based exam objectives of CompTIA certifications and the National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework published by the National Institute of Standards and Technology (NIST).

The NCL 2021 Spring Season began with the Preseason round to group players into one of three competition brackets based on skill level: Gold (top 15% of all players nationally - 629 players), Silver (the next 35% of all players nationally - 1456 players) or Bronze (the next 50% of all players nationally - 2094 players). Players who did not participate in the Preseason were not bracketed or ranked. This made the Individual Game more engaging by grouping players with similar knowledge and skill levels together. At the beginning of the NCL 2021 Spring Season, 6380 students/players and 425 faculty/coaches from more than 520 two- and four-year schools across all 50 U.S. states registered to play.

The Individual Game Capture the Flag (CTF) event took place from March 26 through March 28. The Team Game CTF event took place from April 9 through April 11. The games were conducted in real-time for students across the country.

The NCL 2021 Spring Season was powered by Cyber Skyline's cloud-based skills evaluation platform. Cyber Skyline hosted the scenario-driven cybersecurity challenges for all players to compete and track their progress in real-time.



To validate this report, please access: cyberskyline.com/report/4TE7RRKJT72V



Based on the the performance detailed in this Scouting Report, Ryan Pearson has earned **1 hour** of Continuing Education Units (CEUs) as approved by CompTIA. You can learn more about the NCL - CompTIA alignment via nationalcyberleague.org/comptia

Thank you for your participation in the NCL 2021 Spring 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. Dan Manson
NCL Commissioner





NCL Scouting Report

What follows is a customized NCL Scouting Report of your performance in the NCL 2021 Spring Individual Game. We hope you find it to be valuable in both confirming your skills and identifying areas for improvement. In addition, the NCL Scouting Report can be used as part of any job application, as it provides an external validation of skills as demonstrated in competitive gameplay based on industry-recognized certification exam and framework objectives.

The following definitions apply to your performance across a range of cybersecurity scenarios

- **National Rank:** overall place with respect to all players, across all Brackets
- **Bracket Rank:** overall place within the Bracket
- **Performance Score:** total points earned; the higher the score, the higher the ranking
- **Accuracy:** percentage of flag submissions that were correct (total flag captures divided by total flag attempts).
- **Completion:** percentage of possible flags submitted (total flag captures divided by total possible flags).

The following are the categories of cybersecurity scenarios that you were evaluated against:

1. **Cryptography**
Identify techniques used to encrypt or obfuscate messages and leverage tools to extract the plaintext.
2. **Enumeration & Exploitation**
Identify actionable exploits and vulnerabilities and use them to bypass the security measures in code and compiled binaries.
3. **Forensics**
Utilize the proper tools and techniques to analyze, process, recover, and/or investigate digital evidence in a computer-related incident.
4. **Log Analysis**
Utilize the proper tools and techniques to establish a baseline for normal operation and identify malicious activities using log files from various services.
5. **Network Traffic Analysis**
Identify malicious and benign network traffic to demonstrate an understanding of potential security breaches.
6. **Open Source Intelligence**
Utilize publicly available information such as search engines, public repositories, social media, and more to gain in-depth knowledge on a topic or target.
7. **Password Cracking**
Identify types of password hashes and apply various techniques to efficiently determine plaintext passwords.
8. **Scanning & Reconnaissance**
Identify and use the proper tools to gain intelligence about a target including its services and potential vulnerabilities.
9. **Web Application Exploitation**
Identify actionable exploits and vulnerabilities and use them to bypass the security measures in online services.

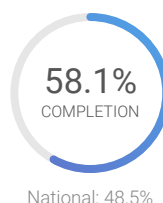
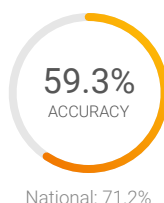
NCL Spring 2021 Preseason

1488 TH PLACE
OUT OF 5794
NATIONAL RANK

720 POINTS
OUT OF 1785
PERFORMANCE SCORE

75th
National Percentile

Averages
National: 615.1



Based on Preseason performance, **Ryan Pearson** was placed into the **Silver Bracket** for the Individual Game.





NCL Spring 2021 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.

873 RD PLACE
OUT OF 4180
NATIONAL RANK

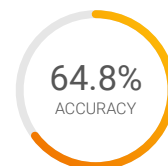
80th
National Percentile

308 TH PLACE
OUT OF 1455
SILVER BRACKET RANK

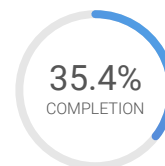
79th
Silver Bracket Percentile

800 POINTS
OUT OF 3000
PERFORMANCE SCORE

Averages
National: 607.9
Silver Bracket: 592.5



National: 66.1%
Silver Bracket: 65.5%



National: 26.3%
Silver Bracket: 26.1%

Cryptography

160 POINTS
OUT OF 325

75.0%
ACCURACY

COMPLETION: **60.0%**

Enumeration & Exploitation

10 POINTS
OUT OF 300

50.0%
ACCURACY

COMPLETION: **7.1%**

Forensics

55 POINTS
OUT OF 310

30.0%
ACCURACY

COMPLETION: **16.7%**

Log Analysis

135 POINTS
OUT OF 360

55.0%
ACCURACY

COMPLETION: **40.7%**

Network Traffic Analysis

35 POINTS
OUT OF 365

42.9%
ACCURACY

COMPLETION: **15.0%**

Open Source Intelligence

85 POINTS
OUT OF 300

62.5%
ACCURACY

COMPLETION: **50.0%**

Password Cracking

220 POINTS
OUT OF 310

95.0%
ACCURACY

COMPLETION: **82.6%**

Scanning & Reconnaissance

0 POINTS
OUT OF 300

0.0%
ACCURACY

COMPLETION: **0.0%**

Web Application Exploitation

0 POINTS
OUT OF 330

0.0%
ACCURACY

COMPLETION: **0.0%**

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.

831 ST PLACE
OUT OF 4180
NATIONAL RANK

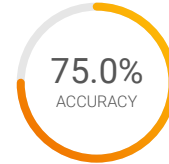
81st
National Percentile

328 TH PLACE
OUT OF 1455
SILVER BRACKET RANK

78th
Silver Bracket Percentile

160 POINTS
OUT OF 325
PERFORMANCE SCORE

Averages
National: 122.0
Silver Bracket: 125.5



National: 80.8%
Silver Bracket: 81.7%



National: 48.1%
Silver Bracket: 49.7%

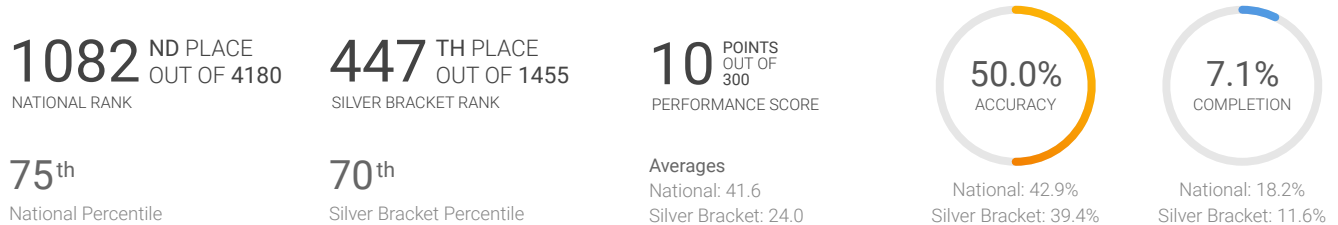
Decoding 1 (Easy)	30 POINTS OUT OF 30	60.0% ACCURACY	COMPLETION:	100.0%
Decoding 2 (Easy)	20 POINTS OUT OF 20	100.0% ACCURACY	COMPLETION:	100.0%
Decoding 3 (Easy)	20 POINTS OUT OF 20	100.0% ACCURACY	COMPLETION:	100.0%
Decoding 4 (Medium)	20 POINTS OUT OF 20	100.0% ACCURACY	COMPLETION:	100.0%
Decoding 5 (Hard)	30 POINTS OUT OF 30	100.0% ACCURACY	COMPLETION:	100.0%
Puzzle (Easy)	40 POINTS OUT OF 40	100.0% ACCURACY	COMPLETION:	100.0%
Hidden (Medium)	0 POINTS OUT OF 50	0.0% ACCURACY	COMPLETION:	0.0%
Bubba (Medium)	0 POINTS OUT OF 50	0.0% ACCURACY	COMPLETION:	0.0%
Unknown (Hard)	0 POINTS OUT OF 65	0.0% ACCURACY	COMPLETION:	0.0%





Enumeration & Exploitation Module

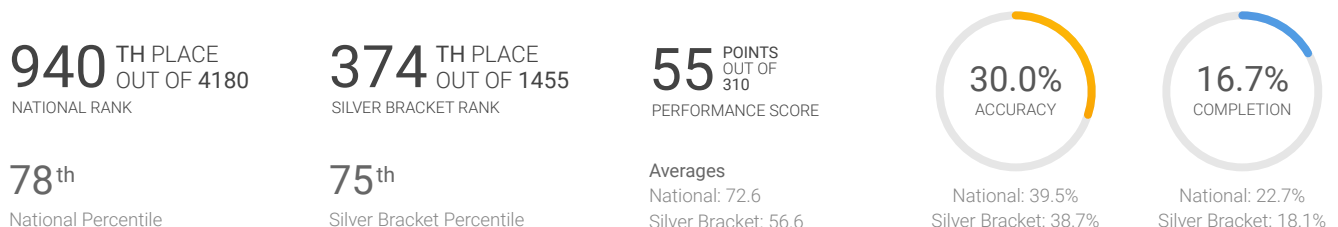
Identify actionable exploits and vulnerabilities and use them to bypass the security measures in code and compiled binaries.



Open Up (Easy)	10 POINTS OUT OF 100	50.0% ACCURACY	COMPLETION:	16.7%
Popping Boxes (Medium)	0 POINTS OUT OF 100	0.0% ACCURACY	COMPLETION:	0.0%
Trash Compactor (Hard)	0 POINTS OUT OF 100	0.0% ACCURACY	COMPLETION:	0.0%

Forensics Module

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



Excellent Tracking (Easy)	25 POINTS OUT OF 75	33.3% ACCURACY	COMPLETION:	50.0%
Image File (Medium)	30 POINTS OUT OF 100	33.3% ACCURACY	COMPLETION:	25.0%
Sessions (Hard)	0 POINTS OUT OF 135	0.0% ACCURACY	COMPLETION:	0.0%





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.

655TH PLACE
OUT OF 4180
NATIONAL RANK

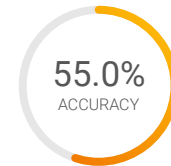
188TH PLACE
OUT OF 1455
SILVER BRACKET RANK

135 POINTS
OUT OF 360
PERFORMANCE SCORE

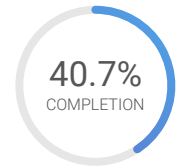
85th
National Percentile

88th
Silver Bracket Percentile

Averages
National: 93.6
Silver Bracket: 70.1



National: 57.5%
Silver Bracket: 57.8%



National: 29.3%
Silver Bracket: 23.0%

AWS Route 53 (Easy)

90 POINTS
OUT OF 100

54.5%
ACCURACY

COMPLETION: **85.7%**

Pacman (Medium)

40 POINTS
OUT OF 110

66.7%
ACCURACY

COMPLETION: **44.4%**

Mobile (Hard)

5 POINTS
OUT OF 150

33.3%
ACCURACY

COMPLETION: **9.1%**

Network Traffic Analysis Module

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

1353RD PLACE
OUT OF 4180
NATIONAL RANK

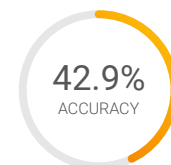
632ND PLACE
OUT OF 1455
SILVER BRACKET RANK

35 POINTS
OUT OF 365
PERFORMANCE SCORE

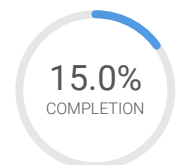
68th
National Percentile

57th
Silver Bracket Percentile

Averages
National: 95.0
Silver Bracket: 77.7



National: 57.9%
Silver Bracket: 58.5%



National: 36.0%
Silver Bracket: 31.3%

Checksum (Easy)

35 POINTS
OUT OF 55

42.9%
ACCURACY

COMPLETION: **60.0%**

Cracking (Medium)

0 POINTS
OUT OF 70

0.0%
ACCURACY

COMPLETION: **0.0%**

WPAD (Medium)

0 POINTS
OUT OF 115

0.0%
ACCURACY

COMPLETION: **0.0%**

Encrypted (Hard)

0 POINTS
OUT OF 125

0.0%
ACCURACY

COMPLETION: **0.0%**





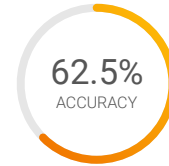
Open Source Intelligence Module

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

1490 TH PLACE
OUT OF 4180
NATIONAL RANK

649 TH PLACE
OUT OF 1455
SILVER BRACKET RANK

85 POINTS
OUT OF 300
PERFORMANCE SCORE



National: 73.4%
Silver Bracket: 72.8%



National: 53.7%
Silver Bracket: 53.4%

65th
National Percentile

56th
Silver Bracket Percentile

Averages
National: 115.4
Silver Bracket: 114.3

Rules of Conduct (Easy)

15 POINTS
OUT OF 15

100.0%
ACCURACY

COMPLETION: **100.0%**

Breached Passwords (Easy)

50 POINTS
OUT OF 50

100.0%
ACCURACY

COMPLETION: **100.0%**

Database Lookup (Medium)

0 POINTS
OUT OF 65

0.0%
ACCURACY

COMPLETION: **0.0%**

Covered QR (Medium)

20 POINTS
OUT OF 70

40.0%
ACCURACY

COMPLETION: **50.0%**

Fake Profile (Hard)

0 POINTS
OUT OF 100

0.0%
ACCURACY

COMPLETION: **0.0%**





Password Cracking Module

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

484 TH PLACE
OUT OF 4180
NATIONAL RANK

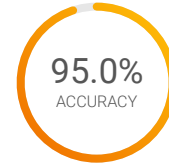
89th
National Percentile

127 TH PLACE
OUT OF 1455
SILVER BRACKET RANK

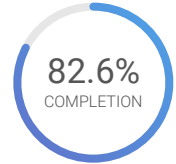
92nd
Silver Bracket Percentile

220 POINTS
OUT OF 310
PERFORMANCE SCORE

Averages
National: 110.5
Silver Bracket: 102.6



National: 89.0%
Silver Bracket: 89.5%



National: 45.3%
Silver Bracket: 42.9%

Hashing (Easy)	15 POINTS OUT OF 15	75.0% ACCURACY	COMPLETION:	100.0%
Cracking 1 (Easy)	30 POINTS OUT OF 30	100.0% ACCURACY	COMPLETION:	100.0%
Cracking 2 (Easy)	45 POINTS OUT OF 45	100.0% ACCURACY	COMPLETION:	100.0%
Cracking 3 (Medium)	45 POINTS OUT OF 45	100.0% ACCURACY	COMPLETION:	100.0%
Cracking 4 (Hard)	45 POINTS OUT OF 45	100.0% ACCURACY	COMPLETION:	100.0%
Cracking 5 (Hard)	40 POINTS OUT OF 100	100.0% ACCURACY	COMPLETION:	66.7%
Zip (Medium)	0 POINTS OUT OF 30	0.0% ACCURACY	COMPLETION:	0.0%

Scanning & Reconnaissance Module

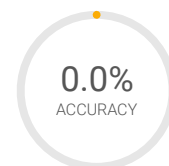
Identify and use the proper tools to gain intelligence about a target including its services and potential vulnerabilities.

N/A
NATIONAL RANK

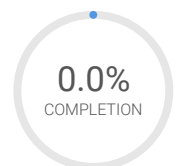
N/A
SILVER BRACKET RANK

0 POINTS
OUT OF 300
PERFORMANCE SCORE

Averages
National: 50.6
Silver Bracket: 35.1



National: 66.8%
Silver Bracket: 67.6%



National: 24.4%
Silver Bracket: 18.4%

Hidden Treasure (Easy)	0 POINTS OUT OF 100	0.0% ACCURACY	COMPLETION:	0.0%
TeamSpeak (Medium)	0 POINTS OUT OF 100	0.0% ACCURACY	COMPLETION:	0.0%
Router (Hard)	0 POINTS OUT OF 100	0.0% ACCURACY	COMPLETION:	0.0%





Web Application Exploitation Module

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

N/A

NATIONAL RANK

N/A

SILVER BRACKET RANK

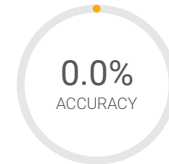
0 POINTS
OUT OF
330

PERFORMANCE SCORE

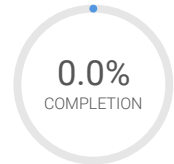
Averages

National: 54.2

Silver Bracket: 32.4



National: 60.3%
Silver Bracket: 58.8%



National: 26.6%
Silver Bracket: 19.9%

Doge Community (Easy)

0 POINTS
OUT OF
100

0.0%
ACCURACY

COMPLETION:

0.0%

Infosec Blog (Medium)

0 POINTS
OUT OF
110

0.0%
ACCURACY

COMPLETION:

0.0%

Hacker Login (Hard)

0 POINTS
OUT OF
120

0.0%
ACCURACY

COMPLETION:

0.0%

