



POWERED BY
CYBER SKYLINE

The National Cyber League
Where Cybersecurity is a Passion

William Seeley
william.seeley@snhu.edu

NCL Spring 2020 Individual Game Scouting Report

Dear William Seeley,

Congratulations on a great NCL 2020 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. Learn more about the NCL at www.nationalcyberleague.org. If you have any questions regarding the information in this report please inquire at info@nationalcyberleague.org.

NCL 2020 Spring Season

The NCL 2020 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. Hosted challenges in the NCL Gymnasium were made available to all players and coaches and aligned to the games. The games were designed around performance-based exam objectives of the CompTIA Security+™ certification and the National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework published by the National Institute of Standards and Technology (NIST).

The NCL 2020 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 - 665 players), Silver (the next 35% of all players nationally - 1540 players) or Bronze (the next 50% of all players nationally - 2193 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.

At the beginning of the NCL 2020 Spring Season, 5900 students/players and 415 faculty/coaches from more than 460 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 April 3 through April 5. The Team Game CTF event took place from April 17 through April 19. The games were conducted in real-time for students across the country.

The NCL 2020 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/W9EW0X63D28L



Thank you for your participation in the NCL 2020 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



POWERED BY
CYBER SKYLINE

The National Cyber League
Where Cybersecurity is a Passion

William Seeley
william.seeley@snhu.edu

NCL Scouting Report

What follows is a customized NCL Scouting Report of your performance in the NCL 2020 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 and Exploitation

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

3. 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.

4. Network Traffic Analysis

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

5. 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.

6. Password Cracking

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

7. Scanning

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

8. Web Application Exploitation

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

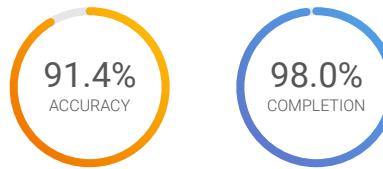
9. Wireless Access Exploitation

Identify the security posture of wireless networks from network captures.

NCL Spring 2020 Preseason

110TH PLACE
OUT OF 5379
NATIONAL RANK

1565 POINTS OUT OF
1760
PERFORMANCE SCORE



98th
National Percentile

Averages
National: 621.6

Based on Preseason performance, William Seeley was placed into the **Gold Bracket** for the Individual Game.

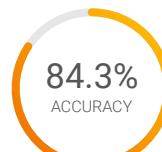
NCL Spring 2020 Individual Game

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.

382ND PLACE
OUT OF 5357
NATIONAL RANK

306TH PLACE
OUT OF 639
GOLD BRACKET RANK

1685 POINTS
OUT OF 3000
PERFORMANCE SCORE



93rd
National Percentile

53rd
Gold Bracket Percentile

Averages
National: 838.6
Gold Bracket: 1619.5

National: 65.6%
Gold Bracket: 77.1%

National: 37.9%
Gold Bracket: 66.4%

Cryptography

285 POINTS
OUT OF 390

81.3%
ACCURACY

COMPLETION:

81.3%

Enumeration and Exploitation

15 POINTS
OUT OF 350

100.0%
ACCURACY

COMPLETION:

16.7%

Log Analysis

110 POINTS
OUT OF 400

50.0%
ACCURACY

COMPLETION:

41.7%

Network Traffic Analysis

300 POINTS
OUT OF 350

91.7%
ACCURACY

COMPLETION:

95.7%

Open Source Intelligence

260 POINTS
OUT OF 260

87.5%
ACCURACY

COMPLETION:

100.0%

Password Cracking

255 POINTS
OUT OF 345

94.4%
ACCURACY

COMPLETION:

89.5%

Scanning

100 POINTS
OUT OF 250

90.0%
ACCURACY

COMPLETION:

81.8%

Web Application Exploitation

105 POINTS
OUT OF 350

100.0%
ACCURACY

COMPLETION:

40.0%

Wireless Access Exploitation

155 POINTS
OUT OF 205

92.3%
ACCURACY

COMPLETION:

92.3%

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



POWERED BY
CYBER SKYLINE

The National Cyber League
Where Cybersecurity is a Passion

William Seeley
william.seeley@snhu.edu

Cryptography Module

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

427 TH PLACE
OUT OF 5357
NATIONAL RANK

311 TH PLACE
OUT OF 639
GOLD BRACKET RANK

285 POINTS OUT OF
390
PERFORMANCE SCORE



93rd
National Percentile

52nd
Gold Bracket Percentile

Averages
National: 146.8
Gold Bracket: 262.2

National: 79.4%
Gold Bracket: 88.5%

National: 47.6%
Gold Bracket: 75.9%

Decoding 1 (Easy)

30 POINTS OUT OF
30

100.0%
ACCURACY

COMPLETION: **100.0%**

Decoding 2 (Easy)

25 POINTS OUT OF
25

100.0%
ACCURACY

COMPLETION: **100.0%**

Decoding 3 (Easy)

25 POINTS OUT OF
25

100.0%
ACCURACY

COMPLETION: **100.0%**

Decoding 4 (Medium)

30 POINTS OUT OF
30

100.0%
ACCURACY

COMPLETION: **100.0%**

Decoding 5 (Hard)

0 POINTS OUT OF
50

0.0%
ACCURACY

COMPLETION: **0.0%**

Decoding 6 (Hard)

80 POINTS OUT OF
80

100.0%
ACCURACY

COMPLETION: **100.0%**

Steg (Easy)

45 POINTS OUT OF
45

66.7%
ACCURACY

COMPLETION: **100.0%**

Image (Medium)

50 POINTS OUT OF
50

100.0%
ACCURACY

COMPLETION: **100.0%**

Docx (Hard)

0 POINTS OUT OF
55

0.0%
ACCURACY

COMPLETION: **0.0%**



POWERED BY
CYBER SKYLINE

The National Cyber League
Where Cybersecurity is a Passion

William Seeley
william.seeley@snhu.edu

Enumeration and Exploitation Module

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

582nd PLACE
OUT OF 5357
NATIONAL RANK

350th PLACE
OUT OF 639
GOLD BRACKET RANK

15 POINTS
OUT OF
350
PERFORMANCE SCORE



100.0%
ACCURACY



16.7%
COMPLETION

90th
National Percentile

46th
Gold Bracket Percentile

Averages
National: 31.9
Gold Bracket: 83.6

National: 57.6%
Gold Bracket: 61.4%

National: 17.8%
Gold Bracket: 32.1%

Bytes (Easy)

5 POINTS
OUT OF
50

100.0%
ACCURACY

COMPLETION:
50.0%

Unknown (Medium)

0 POINTS
OUT OF
90

0.0%
ACCURACY

COMPLETION:
0.0%

Exfiltration (Medium)

10 POINTS
OUT OF
90

100.0%
ACCURACY

COMPLETION:
50.0%

Rookie Malware (Hard)

0 POINTS
OUT OF
120

0.0%
ACCURACY

COMPLETION:
0.0%

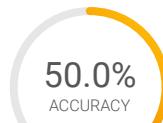
Log Analysis Module

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

1537th PLACE
OUT OF 5357
NATIONAL RANK

525th PLACE
OUT OF 639
GOLD BRACKET RANK

110 POINTS
OUT OF
400
PERFORMANCE SCORE



50.0%
ACCURACY



41.7%
COMPLETION

72nd
National Percentile

18th
Gold Bracket Percentile

Averages
National: 153.8
Gold Bracket: 269.6

National: 50.5%
Gold Bracket: 67.3%

National: 42.4%
Gold Bracket: 73.0%

Event Logs (Easy)

85 POINTS
OUT OF
110

50.0%
ACCURACY

COMPLETION:
83.3%

AWS Flow Logs (Medium)

10 POINTS
OUT OF
135

33.3%
ACCURACY

COMPLETION:
25.0%

Telecommuting (Hard)

15 POINTS
OUT OF
155

75.0%
ACCURACY

COMPLETION:
30.0%



Network Traffic Analysis Module

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

144TH PLACE
OUT OF 5357
NATIONAL RANK

117TH PLACE
OUT OF 639
GOLD BRACKET RANK

300 POINTS OUT OF 350
PERFORMANCE SCORE



98th
National Percentile

82nd
Gold Bracket Percentile

Averages
National: 186.4
Gold Bracket: 262.6

National: 64.2%
Gold Bracket: 77.5%

National: 66.6%
Gold Bracket: 86.7%

ARP (Easy)

60 POINTS OUT OF 60

100.0%
ACCURACY

COMPLETION: **100.0%**

TFTP (Easy)

95 POINTS OUT OF 95

87.5%
ACCURACY

COMPLETION: **100.0%**

DHCP (Medium)

95 POINTS OUT OF 95

87.5%
ACCURACY

COMPLETION: **100.0%**

CAN Bus (Hard)

50 POINTS OUT OF 100

100.0%
ACCURACY

COMPLETION: **66.7%**

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.

244TH PLACE
OUT OF 5357
NATIONAL RANK

145TH PLACE
OUT OF 639
GOLD BRACKET RANK

260 POINTS OUT OF 260
PERFORMANCE SCORE



96th
National Percentile

78th
Gold Bracket Percentile

Averages
National: 177.2
Gold Bracket: 229.6

National: 69.7%
Gold Bracket: 80.7%

National: 76.3%
Gold Bracket: 92.5%

Rules of Conduct (Easy)

15 POINTS OUT OF 15

100.0%
ACCURACY

COMPLETION: **100.0%**

WHOIS (Easy)

50 POINTS OUT OF 50

100.0%
ACCURACY

COMPLETION: **100.0%**

Tax Purposes (Easy)

60 POINTS OUT OF 60

100.0%
ACCURACY

COMPLETION: **100.0%**

Caucus Report (Medium)

85 POINTS OUT OF 85

87.5%
ACCURACY

COMPLETION: **100.0%**

Geolocation (Hard)

50 POINTS OUT OF 50

33.3%
ACCURACY

COMPLETION: **100.0%**



POWERED BY
CYBER SKYLINE

The National Cyber League
Where Cybersecurity is a Passion

William Seeley
william.seeley@snhu.edu

Password Cracking Module

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

150 TH PLACE
OUT OF 5357
NATIONAL RANK

110 TH PLACE
OUT OF 639
GOLD BRACKET RANK

255 POINTS OUT OF
345
PERFORMANCE SCORE



98th
National Percentile

83rd
Gold Bracket Percentile

Averages
National: 113.4
Gold Bracket: 193.1

National: 88.5%
Gold Bracket: 91.3%

National: 43.2%
Gold Bracket: 68.9%

Hashing (Easy)

30 POINTS OUT OF
30

100.0%
ACCURACY

COMPLETION: **100.0%**

Cracking 1 (Easy)

45 POINTS OUT OF
45

100.0%
ACCURACY

COMPLETION: **100.0%**

Cracking 2 (Easy)

45 POINTS OUT OF
45

100.0%
ACCURACY

COMPLETION: **100.0%**

Cracking 3 (Medium)

60 POINTS OUT OF
60

100.0%
ACCURACY

COMPLETION: **100.0%**

Cracking 4 (Hard)

35 POINTS OUT OF
125

100.0%
ACCURACY

COMPLETION: **60.0%**

Zip (Medium)

40 POINTS OUT OF
40

66.7%
ACCURACY

COMPLETION: **100.0%**

Scanning Module

484 TH PLACE
OUT OF 5357
NATIONAL RANK

295 TH PLACE
OUT OF 639
GOLD BRACKET RANK

100 POINTS OUT OF
250
PERFORMANCE SCORE



91st
National Percentile

54th
Gold Bracket Percentile

Averages
National: 75.8
Gold Bracket: 128.7

National: 69.0%
Gold Bracket: 85.1%

National: 46.8%
Gold Bracket: 69.1%

Git (Easy)

75 POINTS OUT OF
75

100.0%
ACCURACY

COMPLETION: **100.0%**

Worksmart (Medium)

25 POINTS OUT OF
75

66.7%
ACCURACY

COMPLETION: **66.7%**

Who's There? (Hard)

0 POINTS OUT OF
100

0.0%
ACCURACY

COMPLETION: **0.0%**



POWERED BY
CYBER SKYLINE

The National Cyber League
Where Cybersecurity is a Passion

William Seeley
william.seeley@snhu.edu

Web Application Exploitation Module

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

373 RD PLACE
OUT OF 5357
NATIONAL RANK

236 TH PLACE
OUT OF 639
GOLD BRACKET RANK

105 POINTS OUT OF
350
PERFORMANCE SCORE



94th
National Percentile

64th
Gold Bracket Percentile

Averages
National: 56.9
Gold Bracket: 103.8

National: 65.3%
Gold Bracket: 72.8%

National: 32.0%
Gold Bracket: 45.5%

Election Hacking (Easy)

105 POINTS OUT OF
105

100.0%
ACCURACY

COMPLETION: **100.0%**

MetroGov (Medium)

0 POINTS OUT OF
115

0.0%
ACCURACY

COMPLETION: **0.0%**

GregsList (Hard)

0 POINTS OUT OF
130

0.0%
ACCURACY

COMPLETION: **0.0%**

Wireless Access Exploitation Module

Identify the security posture of wireless networks from network captures.

155 TH PLACE
OUT OF 5357
NATIONAL RANK

123 RD PLACE
OUT OF 639
GOLD BRACKET RANK

155 POINTS OUT OF
205
PERFORMANCE SCORE



98th
National Percentile

81st
Gold Bracket Percentile

Averages
National: 91.4
Gold Bracket: 136.8

National: 61.7%
Gold Bracket: 79.2%

National: 60.3%
Gold Bracket: 82.7%

Cracking 1 (Easy)

70 POINTS OUT OF
70

83.3%
ACCURACY

COMPLETION: **100.0%**

Cracking 2 (Medium)

60 POINTS OUT OF
60

100.0%
ACCURACY

COMPLETION: **100.0%**

Cracking 3 (Hard)

25 POINTS OUT OF
75

100.0%
ACCURACY

COMPLETION: **75.0%**