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The Colorado Cyber Games

Kyle Leupold

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```
[kyle@SRDI ~]# powerpt init
[kyle@SRDI ~]# powerpt new cyber-games.ppt
[kyle@SRDI ~]# powerpt edit cyber-games.ppt
[kyle@SRDI ~]# ./titleSlide.sh
```

The Colorado Cyber Games

and my experience as a competitor.

```
[kyle@SRDI ~]# echo "Presented by Kyle Leupold"
Presented by Kyle Leupold
```



```
[kyle@SRDI ~]# echo "Competition Overview"
```

Competition Overview

```
[kyle@SRDI ~]# cat overview.txt
```

- # Open to the public
- # Hosted by the Colorado Cyber Resource Center (CCRC)
- # Took place throughout October '22
- # Competitors faced off against each other to complete weekly virtual challenges
- # Challenges were given through a virtual training platform, RangeForce
- # Great way for employers to identify potential talent

[kyle@SRDI ~]# echo "Experience - Before"

Experience - Before

[kyle@SRDI ~]# ./generateExperienceBefore.sh

I've never competed in a cyber competition before

I first heard about the competition from my supervisor at the time

I originally entered to test the waters per say

Prior to starting a challenge, details were kept secret - this made it impossible to prepare

```
[kyle@SRDI ~]# echo "Experience - During"
```

Experience - During

```
[kyle@SRDI ~]# ./generateExperienceDuring.sh
```

```
# After seeing who I was competing against, I felt intimidated
```

```
# Other competitors had high-level certifications, I didn't
```

```
# I made sure to take time reading the challenge details and scope given
```

```
# At no point did I feel like I was 'winning'
```

```
# The virtual platform worked as expected for me - I had no issues with connections, tools, etc.
```

[kyle@SRDI ~]# echo "Experience - After"

Experience - After

[kyle@SRDI ~]# ./generateExperienceAfter.sh

I ended up placing first nationally

I had the shortest average completion time for all the challenges

For each challenge won, I was awarded a year-long subscription to the same online cyber-range platform that hosted the competition

I ended up donating two of the subscriptions to others studying cybersecurity

I did get a handful of connection opportunities with interested employers who were watching the leaderboard

[kyle@SRDI ~]# ./displayChallenges.sh

Challenge Overview

Challenge #1 – Linux Command Line Fundamentals

Test your knowledge of basic linux server administration tools and commands.

Learning Outcomes

- Knows how to manage users
- Knows how to manage files
- Knows how to manage software
- Knows how to create and execute basic scripts
- Knows how to gather system information

Challenge #2 – Malicious Process Tracing in Windows

Use Splunk to find and trace malicious processes within a Windows environment.

Learning Outcomes

- Knows how to trace processes with Sysmon
- Knows how to query events in Splunk
- Can identify malicious activity

[kyle@SRDI ~]# ./displayChallenges.sh

Challenge Overview (Cont.)

Challenge #3 and #4 – SSH Backdoor 1 and 2

Identify how the hacker is getting in via SSH and able to create files in the root directory.

Learning Outcomes

- Understands the concepts of backdoors
- Understands how to apply different analysis methods to find backdoors in infected systems

[kyle@SRDI ~]# leaderboard -d 4

Name	Time to Complete	Overall Rank	Challenge 1 Rank (Time)	Challenge 2 Rank (Time)	Challenge 3 Rank (Time)	Challenge 4 Rank (Time)	Resume	LinkedIn Profile	School Affiliation	Industry Certifications
Kyle Leupold	00:42:40	1	00:14:43	00:27:43	03:06:00	00:42:40		Kyle's LinkedIn	Johnson & Wales University	Comp TIA Security+
Trevor Smith	02:07:57	2	02:30:33	02:21:22	12:38:00	02:07:57	Trevor's Resume			CISSP: Certified Information Systems Security Professional
Takayuki Arai	00:23:16	3		00:10:53	03:48:00	00:23:16			SANS Technology Institute	OSCP: Offensive Security Certified Professional
Mario Zamora		4	00:23:12	00:17:50			Mario's Resume	Mario's LinkedIn	CSU – Pueblo	CISM: Certified Information Security Manager

[kyle@SRDI ~]# echo "Final Thoughts"

Final Thoughts

[kyle@SRDI ~]# cat finalThoughts.txt

- # Competitions can be a great way to help strengthen the candidate to employer pipeline
- # I plan on continuing to participate in competitions like the Colorado Cyber Games
- # I believe the experience gained participating in competitions, no matter the result, can be an invaluable learning opportunity
- # I thought competing was fun and I enjoyed the overall experience

[kyle@SRDI ~]# ./closingSlide.sh

Thank you!

Feel free to connect with me on LinkedIn or reach out with the information below!

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