Making Cybersecurity Work Roles More Attractive with Music: Aligning Music (NOT KU's) to Cyber

Stan Mierzwa, POC Kean University

Making Cybersecurity Work Roles More Attractive with Music

Stan Mierzwa, POC Kean University

Abstract

- Inspired by a Cloud Security Alliance write-up by the presenter, this session will bring about a fun and interactive Lightning Talk on the topic of introducing music that aligns with the varied work roles and tasks in cybersecurity activities. This Lightning Talk will utilize and play some minor snippets of music (as loud as possible) that correspond to the National Initiative for Cybersecurity Education (NICE) Workforce Framework. The session will be helpful in possibly inspiring participants to consider ways to better and further relate to those students who may be "on the fence" in considering the cybersecurity workforce. Music has the potential to inspire and generate energy that may not have been present previously. As we continue to work towards the challenge of recruiting and educating the next generation of cybersecurity professionals, perhaps it is time to think differently, and use such resources as music! Content for this presentation will be pulled from the article below, authored by the proposed speaker.

Inspiration

For Fun – Aligning or Putting Music to the Varieties of Efforts, Tasks, Work Roles, and Functions in Cybersecurity

Produced by: Stan Mierzwa, M.S., CISSP, CCSK, Cloud Security Alliance NJ Chapter President

Contributions by: Eliot Perez, Assistant Director Security, Transportation Industry and Cloud Security Alliance NJ Chapter Board Member

Todd Edison, Chapter Relations Manager, Cloud Security Alliance

Align with NICE Framework

NICE Category	Music Genre	Artist Example
Securely Provision	Soft Rock	Eagles
Operate & Maintain	Rap	Wu-Tang Clan
Oversee & Govern	Rhythm & Blues	Boyz II Men
Protect & Defend	Heavy Metal	Iron Maiden
Analyze	Classical	Itzhak Perlman
Operate & Collect	Jazz	Louis Armstrong
Investigate	Movie Score	Movie - Invictus

Table 1. NICE Workforce Framework Categories (source: Stein, et al., 2017).

Abstract

- Inspired by a Cloud Security Alliance write-up by the presenter, this session will bring about a fun and interactive Lightning Talk on the topic of introducing music that aligns with the varied work roles and tasks in cybersecurity activities. This Lightning Talk will utilize and play some minor snippets of music (as loud as possible) that correspond to the National Initiative for Cybersecurity Education (NICE) Workforce Framework. The session will be helpful in possibly inspiring participants to consider ways to better and further relate to those students who may be "on the fence" in considering the cybersecurity workforce. Music has the potential to inspire and generate energy that may not have been present previously. As we continue to work towards the challenge of recruiting and educating the next generation of cybersecurity professionals, perhaps it is time to think differently, and use such resources as music! Content for this presentation will be pulled from the article below, authored by the proposed speaker.

Power of Music

- Music has the massive power to provide immense inspiration and energy for work roles. Including a variety of tools, together with music, can help to improve creative thinking of students (Guan, 2021).

The Tunes

- **DEFENSE**

- *Patching*
- Genre: Hip-hop
- Artist: OutKast ("**Hey Ya**!")

-

The Tunes

- **DEFENSE**

- *Identify Unused Attack Surface Entities (Turn off!)*
- Genre: Rock and Roll
- Artists: Twisted Sister ("**We're Not Gonna Take It**")

The Tunes

- **DEFENSE**

- *3rd Party Provider Access*

- Genre: TV Shows

- Artists: Theme from Miami Vice

The Tunes

- **RECOVER**

- *Creation of an Incident Command Team*
- Genre: Heavy Metal
- Artist: Judas Priest ("**Breaking The Law**")

The Tunes

- **RECOVER**

- *Recovery Preparations*

- Genre: Rock to Light Rock

- Artist: Eagles ("**In The City**")

The Tunes

- **RECOVER**

- *Incident Response*
- Genre: K-Pop
- Artist: KTS (OK – let's use "Gangham Style")

The Tunes

- **RECOVER**

- *Recovery Processes and Procedures*
- Genre: Rhythm and Blues
- Artist: Otis Redding ("**These Arms of Mine**" and "**Stand By Me**")

The Tunes

- **RECOVER**

- *Activation of Disaster Recovery*
- Genre: Country
- Artist: Tammy Wynette ("S**tand By Your**")

Limitations

- As may be expected, many may read this write-up and **not agree** with the music choices to map to the cybersecurity tasks and roles (SAY WHAT?). This should be expected since taste in music can certainly vary. However, it can be expected and anticipated that many readers will come up with their own lists.

Thank You

- Thank You!

References

- Guan. M. (2021). The role of classical music in the creative thinking of university students. *Thinking Skills and Creativity. 41*(2021).

- Mierzwa, S., Perez, E. & Edison, T. (2022). For Fun – Aligning or Putting Music to the Varieties of Efforts, Tasks, Work Roles, and Functions in Cybersecurity. Cloud Security Alliance. As retrieved from: https://cloudsecurityalliance.org/blog/2022/05/27/for-fun-aligning-or-putting-music-to-the-varieties-of-efforts-tasks-work-roles-and-functions-in-cybersecurity/

- Music Genres List. (2022). Genres of Music – The Most Definitive Music Genre List on the Web! As retrieved from: https://www.musicgenreslist.com/

- Petersen, R., Santos, D., Wetzel, K., Smith, M. & Witte, G. (2020). SP 800-181 Rev. 1 Workforce Framework for Cybersecurity (NICE Framework). As retrieved from: https://csrc.nist.gov/publications/detail/sp/800-181/rev-1/final

- Stein, D., Scribner, B., Kyle, Nl, Newhouse, W., Williams, C. & Yakin, B. (2017). National Initiative for Cybersecurity Education (NICE) Framework Work Role Capability Indicators. As retrieved from: https://csrc.nist.gov/CSRC/media/Publications/nist...