

ISQS 5342: Big Data Security – Final Presentation

Project Scenario – Assume you are a security data analyst of a company in the industry you selected. Your team is assigned a data science project for Cyber Threat Intelligence (CTI), whose purpose is to protect your company from existing and emerging cyber threats.

You can make reasonable assumptions for the conditions not mentioned in this document (e.g., number of employees, annual revenues, etc.). However, make sure the assumptions are consistent throughout this group project.

Goal – The final presentation aims to provide you with the opportunity to summarize and present your group project. You will create a set of PowerPoint slides and present your work and findings in the three milestones.

Submission Requirements – Each group will **submit a set of PowerPoint slides** on Blackboard. Most content of the slides is expected to be from your milestone documents as follows:

- Milestone 1
 - Part 1: Introduction and Industry Background (2-3 slides)
 - Part 2: Threat Trends (1-2 slides)
 - Part 3: Critical Asset Identification (1-2 slides)
 - Part 4: Three Threat Scenarios (3 slides)
 - Part 5: Intelligence Buy-in (1 slide)
- Milestone 2
 - Part 6: Dataset Identification and Justification (2 slides)
 - Part 7: Collection and Parsing Strategies (1-2 slides)
 - Part 8: Data Summary (4 slides)
- Milestone 3
 - Part 9: Observations on Data Patterns (at least 4 slides)
 - Part 10: Artifact Selection (flexible)
 - Part 11: Artifact Presentation with Discussions on Findings (flexible)
- Group Roles

In addition, each group is required to **present the slides on Blackboard Collaborate** and **record the presentation**. You do not need to submit the recording as I am able to assess it via Collaborate.

All group members should show up in the presentation.

Instructions

Please address my comments on your milestones as much as you can. Unaddressed comments may lead to deduction of points on the final presentation.

Part 1: Introduction and Industry Background (2-3 slides) –

Introduce your group. Provide a background of your industry with relevant facts and figures.

Part 2: Threat Trends (1-2 slides) –

Summarize key threat trends and detail your process of threat trending (e.g., data sources).

Part 3: Critical Asset Identification (1-2 slides) –

Describe the five critical assets you identified in the industry and why they are critical.

Part 4: Three Threat Scenarios (3 slides) –

Among the five threat scenarios you identified, present the three most representative scenarios by presenting the adversary, capabilities, infrastructure, and victim. *One slide for each scenario.*

Part 5: Intelligence Buy-in (1 slide) –

Provide adequate detail to justify the development of CTI for your industry.

Part 6: Dataset Identification and Justification (2 slides) –

Describe where you found your datasets and how they bring value to developing CTI in your industry. *One slide for each dataset.*

Part 7: Collection and Parsing Strategies (1-2 slides) –

Describe how you collected your datasets and how they were parsed in a format ready for analytics.

Part 8: Data Summary (4 slides) –

Present the data dictionary for each dataset and discuss its highlights. Present 2-3 representative examples of data instances in each dataset. *Two slides for each dataset (one for data dictionary, one for examples).*

Part 9: Observations on Data Patterns (at least 4 slides) –

Present the visualizations on the interesting patterns in your datasets. Discuss why the patterns you identified are interesting in the context of CTI. *One slide for each visualization.*

Part 10: Artifact Selection (flexible) –

Summarize your proposed artifact and justify the selection on your artifact. Describe the steps in building the artifact and the tools, software, or programming libraries you used.

Part 11: Artifact Presentation with Discussions on Findings (flexible) –

Present the artifact you built as per the instructions in Milestone 3. Discuss the key findings and insights you found from the artifact in the context of CTI in your industry.

Group Roles –

Summarize the roles you played in the group project (not limited to this presentation).

Professionalism –

Make sure your slides are completely error free (e.g., typos and grammatical errors), legible (e.g., fonts not too small, texts in figures easy to read), well-organized and flow well. All group members should present some part of the slides. The dress code is business casual.

Good luck!