The purpose of this technology review is to identify an emerging application of technology, suitable for use by businesses or consumers, and then research the cybersecurity implications of the technology using journal articles, papers published in conference proceedings, and research studies published in dissertations. This type of research is also referred to as a survey of the literature.

Paper details:

Choose an Emerging Application of Technology; To begin, choose an emerging application of technology, which is suitable for future use in a consumer-oriented product or service (i.e., a new product for personal or home use) or a business-oriented product or service. Applications of technology that are currently in the emerging stages include: • Machine Learning and/or Artificial Intelligence • Data Science (especially when used to identify patterns and indicators of threats and attacks) • Blockchain Technology • 5G Telecommunications Networks • Physical Unclonable Functions (PUFs) (devices & electrical circuits) • Graphene • Nano machines • Neuromorphic computer chips

**Overview**

Your audience is a group of senior executives who will be meeting to decide which emerging technologies or emerging applications of technologies should be selectedfor one or more security-focused, Internal Research & Development projects during the next budget cycle. Each of these executives is responsible for a business area that will (a) develop products that incorporate emerging applications of technology or (b) depend upon such products to support their organization’s operations.

The high-level visibility for your deliverable means that you need to start from a strong foundation of suitable research-based journal articles, papers published in conference proceedings, and doctoral dissertations. The basic question that must be answered is: what are the cybersecurity implications (good or bad) of a specific emerging application of technology.

In addition, the executives have expressed the following information needs, which must be met by the deliverable for this assignment.

1. characteristics of the technology,
2. use of the technology to support or improve cybersecurity,
3. use of the technology to reduce or manage risk,
4. use of the technology to increase resistance to threats/attacks,
5. use of the technology to decrease vulnerabilities in an existing technology application,
6. use or exploitation of the technology by attackers, criminals, terrorists, etc. to accomplish their goals.