

CS5332-Summer2021-Project2

Survey of Application Software Security

Application Areas:

1. Cyber physical systems, e.g.,
 - Medical monitoring
 - Smart factory
 - Autonomous Automobile
2. Blockchain-based systems (but not cybocurrency like Bitcoin), e.g.,
 - Smart contracts (e.g., for real estate processing)
 - Secure sharing of medical data
 - Supply chain and logistics monitoring
3. AI-based applications, e.g.,
 - Medical diagnosis with AI
 - AI tutors
 - Trading and investment with AI
4. Software Defined Networking (one application) consisting of:
 - Application, Control, and Data layers

Presentation Slides: should include the following:

1. What does the applications (systems) do? (2 pts)
 - Include software architecture if available.
2. Functional and non-functional requirements (2 pts)
 - Major functions
 - Qualities considered (non-functional requirements)
3. Security challenges and security countermeasures (8 pts)
 - For each security challenge
 - i. What is the security challenge?
 - ii. Known security measures
 - iii. Still unsolved issues in security challenge or security measures
4. Presentation (3 pts)
 - PPT file – Presentation slides (15-20 minutes)

References

- Two or three survey papers for applications