

CMPE 220 – Areas for Special Topic Report

(by Prof. Weider Yu)

A. Systems Software Security

- This area covers software security technologies used on various types of systems software to **ensure** and **improve** systems software security.
 - i. integrated development environment (IDE),
 - ii. operating systems,
 - iii. compilers (or interpreters) for programming languages or specification languages,
 - iv. web-based systems,
 - v. Internet based systems,
 - vi. Cyber security systems,
 - vii. intrusion and detection systems,
 - viii. assemblers,
 - ix. wireless mobile systems,
 - x. distributed systems,
 - xi. middleware,
 - xii. linkers/loaders,
 - xiii. macro-processors,
 - xiv. debugging and testing systems,
 - xv. communication network protocols,
 - xvi. communication network systems (wireline or wireless),
 - xvii. database system and management systems,
 - xviii. data mining and data warehousing systems,
 - xix. other computer or communications related systems.

B. Systems Software Quality and Reliability

- This area covers systems software quality and reliability technologies used on various types of systems to **ensure** and **improve** systems software quality and reliability, such as:
(For a list of systems, use the same list as above)

C. Systems Software Performance

- This area covers software performance technologies used on various types of systems software to **ensure** and **improve** systems software performance.
(For a list of systems, use the same list as above)

D. Systems Software Privacy

- This area covers software privacy technologies used on various types of systems software to **ensure** and **improve** privacy related issues.
(For a list of systems, use the same list as above)