CPRE 431

Homework #5 (Due: Oct. 11)

Assignments will be submitted in PDF format via Canvas.

Please submit your homework online through Canvas. Late homework will not be accepted. Important: Your submission must be in .pdf format ONLY!

- 1. Describe the differences between a host-based IDS and a network-based IDS. How can their advantages be combined into a single system?
 - Host based can detect internal changes within a system while network based can detect unusual behavior or malicious packets being sent on the network. The advantages can be combined together to provide safer security both from a system standpoint and a network standpoint.
- 2. What are three benefits that can be provided by an IDS? Defense, Virus tracking Propagation, and clear visibility.
- 3. What is the difference between a false positive and a false negative in the context of an IDS?
 - False positives detect safe software as potentially dangerous, while false negatives detect software that is dangerous as safe or fails to detect.
- 4. What is the difference between anomaly detection and signature intrusion detection? Signature based is used for detecting threats, while Anomaly based is used for detecting any changes in a System's software