

Transforming Lives. Inventing the Future. www.iit.edu

## SOFTWARE QUALITY MANAGEMENT CSP587

Prof. Dennis Hood Computer Science

## Homework #4

- Self-driving car real-time safety assessment
  - Risk of an accident
  - Risk of a system element failing
  - Risk that the human "passengers" lack awareness
- Develop a plan for assuring safety in real time
  - 1. Define a set of relevant metrics for each threat type and describe an automated collection mechanism for each
  - 2. Describe an automated analysis process which calculates exposure and then warns the passengers if necessary
  - 3. Design a process which automatically escalates the warning if the passengers do not react to a warning
- Please submit via Blackboard by 11/20