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SOFTWARE ENGINEERING

CS 487

Prof. Dennis Hood
Computer Science

Homework #2

- Design a pedestrian crosswalk control system:
 - For crosswalks, as opposed to intersections (e.g. State St.)
 - Allows pedestrians to cross the street safely
 - Allows vehicle traffic to flow with minimal delay
 - Minimizes manual operation (maximally automated)
 - by interfacing with sensors and signaling devices
 - Enhances the *awareness* of all human “users”
 - Detects and handles exceptional situations
- Deliverable requirements:
 1. Draw a context model showing all system components
 2. Draw a state-transition diagram or provide a table showing each state and each associated transition
 3. Specify a binary protocol for all C-C-I communication
 4. Specify a protocol for all H-C-I communication such that human-user awareness is maximized
 5. Use pseudo-code to show the exception detection and handling for any failure
- Submit to Blackboard by 2/19/22