CSC9006: Real-Time Systems

Lecture 5: Simplicity and The Notion of Time

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Coverage in this lecture

- Scheduling dependent tasks

  – Priority Inheritance Protocol (PIP)

  – Priority Ceiling Protocol (PCP)

- Model building and a call for simplicity

- Time measurement

- Clock synchronization

  – Internal

  – External

Reference materials

- From the course website (https://wangc86.github.io/csc9006/)

  Textbook [A], Chapters 2 and 3

  Textbook [B], Sections 7.1-7.3; 7.6; 7.7

- IEEE. 2008. IEEE standard for a precision clock synchronization protocol for networked measurement and control systems. IEEE Std 1588-2008 (Revision of IEEE Std 1588-2002) (July 2008), 1–300.