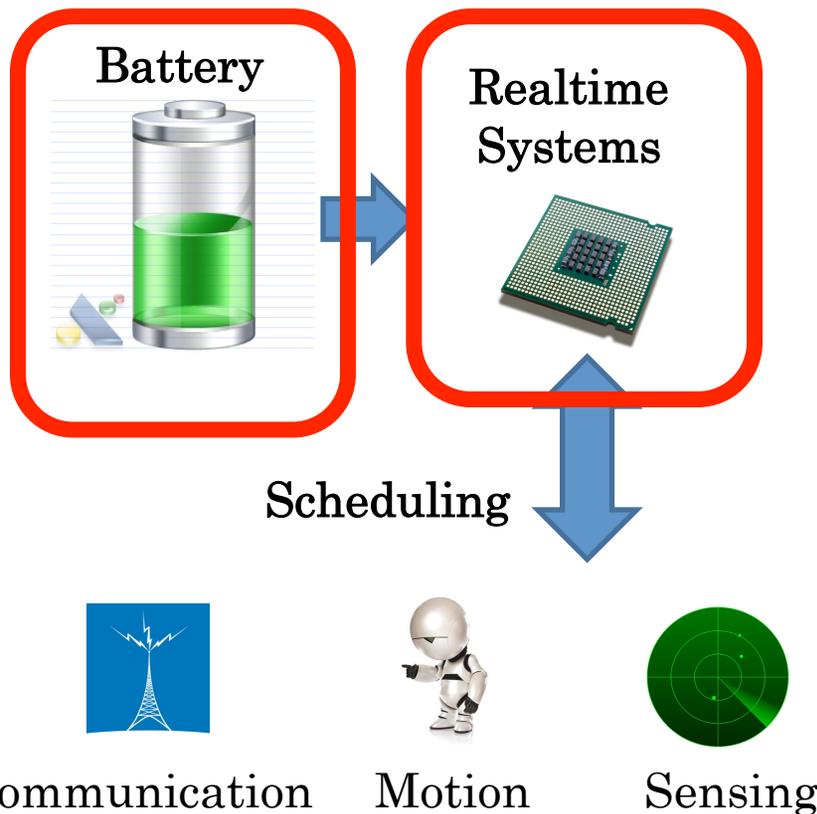


Y1-Battery Powered CPS: Robustness

Establish a Unified Theoretical Foundation for Robustness of CPS



Work Completed

- ❖ Established a general hybrid systems model for any real-time scheduling algorithms.
- ❖ Introduced a novel concept of dynamic schedulability.
- ❖ Introduced a measure for robustness of scheduling algorithms.
- ❖ Developed a new criteria for battery failure based on stability theory.
- ❖ Introduced a measure for robustness of battery switching algorithms.
- ❖ Our analytical methods have advantage over computation methods.