Planning Meeting for the National Workshop on

The New Clockwork for Time-Critical Systems

June 11 and 12, 2012

Holiday Inn
2800 Presidential Drive,
Fairborn, Ohio, 45324

(Dayton, Ohio)

Agenda

*There will be approximately 25-30 attendees at this meeting. The scheduled talks will be forward looking with emphasis on the key issues that require new research effort. Such issues include **but are not limited** to timing vulnerability, faults caused or ameliorated by the use of synchronized clocks and time, missing or incomplete technology, unexplored areas between technologies, temporal consensus, performance, and temporal issues related to distributed systems, wireless connectivity, and mobility. The speakers will set the stage for discussion in which attendees are strongly encouraged to contribute.*

June 11, 2012

0730 – 0830 **Continental Breakfast (Provided)**

0830 – 0840 **Welcome and Participant Introductions**

0840 – 0900 **Session 1: Introduction (Helen Gill, John Eidson, Raj Rajkumar)**

Workshop objectives & introductions

0900 –1000 **Session 2: Clock Synchronization (Moderator: John Eidson)**

Summary of key timing and timing security (30 minutes each)

GPS, IEEE 1588/SyncE, NTP, Clock technology: John Eidson (UC Berkeley)
Timing and Security: Karen O'Donoghue (ISOC)

1000 – 1030 **Coffee Break (Provided)**

1030 – 1200 **Session 3: Example Application Domains for Synchronized Clocks (Moderator: Raj Rajkumar)**

Application-driven topics for new research (30 minutes each)

Power systems: Santiago Grijalva (Georgia Tech)
Defense: Rick Buskens (LMCO)
Transportation: Bill Milam (Ford)

1200 – 1300 **Lunch (Provided)**

1300 – 1505   **Session 4: CPS Issues   (Moderator: Al Mok) (25 minutes each)**

The Next Frontiers for CPS

Timing and Scheduling: Sanjoy Baruah (UNC)
Physically Asynchronous Logically Synchronous (PALS): Darren Cofer (Rockwell Collins)
Timing Robustness and Fault-tolerance: John Rushby (SRI)
Time and Networking (local, wide area): Keith Marzullo (UC San Diego)
Time and Wireless Sensor Networks: Jack Stankovic (Virginia)

1505 – 1530   **Coffee Break (Provided)**

1530 – 1645   **Session 5: CPS Issues (continued) (moderator: Al Mok) (25 minutes each)**

Time and Software Systems (Part 1): Raj Rajkumar (CMU)
Time and Software Systems (Part 2): Christopher Brooks (UC Berkeley)
Time and Controls: Paulo Tabuada (UCLA)

1645 – 1800   **Session 6: Drafting CPF and Agenda for fall workshop: (moderator: Raj Rajkumar), (Scribe TBD)**

Main issue is which topics to include and whether they are invited or contributed and how we manage acceptance.

1800   **Adjourn for the day. Dinner is own your own.**

June 12, 2012

0730 – 08:40   **Continental Breakfast (Provided)**

0830 – 0845   **Session 7: Meeting Summary and Remaining Tasks (Helen Gill, John Eidson, Raj Rajkumar)**

0845 – 1000   **Session 8: Continue drafting CPF and Agenda for fall workshop: (Moderator: Raj Rajkumar), (Scribe TBD)**

Main issue is which topics to include and whether they are invited or contributed and how we manage acceptance.

1000 – 1030   **Coffee Break (Provided)**

1030 –1200   **Session 9: Generating final invitee list, keynote speakers, session chairs, implementation plan. (Moderator: John Eidson), (Scribe: TBD)**

Main issue is to say yes/no to each name, and to determine the invitation and acceptance process.

1200   **Meeting Adjourn, Lunch available to those that want it.**