

Center for Intelligent Maintenance Systems
10th Industrial Advisory Board Meeting
Thursday December 1st

7:30	Registration and Breakfast
8:00	Host Welcome – Toyota Senior Vice President: Steve St Angelo Remarks by: Dean Roy EckKart, College of engineering, University of Cincinnati Directors' Remarks: Professors Jay Lee, Jun Ni, IMS Co-directors
8:10	IAB Chairman's Address and Introduction of Attendees
8:25	Remarks by the NSF Program Director
8:35	Introduction to the Multi-Campus IMS Center – Professor Jay Lee, IMS Director
8:50	Technical Session <ul style="list-style-type: none"> • Watchdog Agent™ research overview – Dr. Dragan Djurdjanovic • Industrial networks and health monitoring – Yong Lei, Dr. Leandro Barajas (GM) • Sensor degradation – <ul style="list-style-type: none"> - Methodology: Tools for sensor performance assessment – Li Jiang - Testbed validation: Toyota proximity sensor testbed project – Ashwin Balasubramanya • Quality function deployment (QFD) based Watchdog Agent™ tool selection – Dr. Xiaoqin Ma • Development of a reconfigurable Watchdog Agent™ hardware platform – Prof. Yongchang Du
10:15	Break
10:30	Briefing on Member Company-Supported Projects <ul style="list-style-type: none"> • A novel tool for anomaly detection – Dr. Ken Marko (ETAS), Jianbo Liu • Tools for bearing failure prognosis – Toyota testbed – Mark Rucker (Toyota), Hyunsu Kim • Data-driven modeling of surge map for centrifugal air compressors – Prof. Yaoyu Li • Robot predictive maintenance – Bryan Watts (Toyota), Abbey Yee
11:30	Member Initiated Projects <ul style="list-style-type: none"> • Smart monitoring and intelligent maintenance of Komatsu mining equipment and diesel engines – Takahiro Ueda (Komatsu) • Smart machine tool predictive maintenance testbed – Dr. Anil Srivastava (TechSolve)
12:00	New NSF Funded Projects <ul style="list-style-type: none"> • Maintenance of complex system using cumulative damage model and distributed multi-agent decision-making – Dr. Xiaoqin Ma, Pranav Kumar • NSF TIE project with Auburn University: Predictive monitoring and failure prevention of vehicle electronic components and sensor systems – Prof. Haitao Liao
12:30	Lunch - Video tour of Toyota

1:30	Updates of Other Collaborative Projects <ul style="list-style-type: none"> • SRC Project - Intelligent maintenance for next-generation high-yield fab – Yang Liu, Pranav Kumar • Collaborative project with the Technical University of Berlin: Embedded life cycle unit for prognostics of mechanical systems – Rifet Muminovic • Collaborative project with the University of Toronto: A hybrid platform for diagnostics, prognostics and predictive maintenance – Prof. Kondo Adjallah (UTT)
2:00	Solicitation of New Projects and Open Discussions: issues and new opportunities for new IMS projects
3:00	Poster and Demonstration Session
5:00	New company presentation <ul style="list-style-type: none"> • GEAE, Boeing, Caterpillar, Festo, Chevron, BaoSteel, Kistler
5:30	Break
6:00	Reception with cash bar, Dinner to follow (Speaker TBD)

Friday December 2nd

7:30	Breakfast	
8:00	LIFE Forms Feedback Session	
9:30	New IMS Satellite Site at Univ. of Missouri-Rolla Briefing	
10:00	Closed Door Session – <i>members only</i> <ul style="list-style-type: none"> • Multi-campus IMS Operations (Inter-Institution Agreement, IP,..) • Approval of IAB 9 Minutes • Election of IAB Chairman • Financial/Operational Report • Annual Member Survey-Ron Beck • New Business • Choose IAB 11 date 	This session is open only to IMS Members and selected guests as approved by IAB Chairman and Co-Directors IN ADVANCE OF MEETING.
12:00	Lunch & Networking Time (boxed lunches)	
12:30	Adjourn	
1:00 - 5:00	Individual Company Discussions with IMS Center Directors and Researchers and Industry forum with Toyota engineers	