



HCMDSS / MD PnP'09

2nd Joint Workshop on High Confidence Medical Devices, Software, and Systems (HCMDSS) and Medical Device Plug-and-Play (MD PnP) Interoperability

April 16, 2009
San Francisco, CA
Parc 55 Union Square Hotel

Held in Conjunction with CPSWeek 2009

- 8:15 – 8:30am Welcome from Workshop Co-Chairs
Insup Lee, PhD, University of Pennsylvania
Julian M. Goldman, MD, Massachusetts General Hospital / CIMIT
- 8:30 – 9:30am Keynote Address: *Thomas P. Engel, MD*
Medical Director, Applied Medical Informatics Group
University of California Davis
- 9:30 – 10:00am Break
- 10:00 – 11:30am **HCMDSS**
- 10:00 – 10:10am CPS Projects in the HCMDSS Domain
Insup Lee
- 10:10 – 10:35am Engineering High Confidence Medical Device Software
A. Ray, R. Jetley, P. Jones
- 10:35 – 11:00am A Tool for Designing High-Confidence Implantable BioSensor Networks
for Medical Monitoring
S. Gupta
- 11:00 – 11:15am An Event Driven Framework for Assistive CPS Environments
F. Makedon, Z. Le, H. Huang, E. Becker
- 11:15 – 11:30am Safety Enhancements of Home Lift, Position, & Rehabilitation (HLPR)
Chair
J. Zalewski, D. Guo, C. Csavina, J. Sweeney, R. Bostelman, K. Kirsner
- 11:30am – 12:30pm Lunch

12:30 – 2:15pm	MD PnP
12:30 – 12:45pm	MD PnP Update <i>Julian M Goldman</i>
12:45 – 1:10pm	A Concept for a Medical Device Plug-and-Play Architecture based on Web Services <i>S. Pöhlsen, S. Schlichting, M. Strähle, F. Franz, C. Werner</i>
1:10 – 1:35pm	A Publish-Subscribe Architecture and Component-based Programming Model for Medical Device Coordination and Integration <i>A. King, S. Procter, D. Andresen, J. Hatcliff, S. Warren, W. Spees, R. Jetley, P. Jones, S. Weininger</i>
1:35 – 2:00pm	A Modular Framework for Clinical Decision Support Systems: Medical Device Plug-and-Play is Critical <i>M. Williams, F. Wu, P. Kazanzides, K. Brady, J. Fackler</i>
2:00 – 2:15pm	Standards for Physiological Data Transmission and Archiving for the Support of the Service of Critical Care <i>J.M. Eklund and C. McGregor</i>
2:15 – 2:30pm	Break
2:30 – 4:00pm	Panel: R&D Collaboration Opportunities in HCMDSS and MD PnP <i>Moderator: Insup Lee</i> Panelists: <i>Helen Gill, NSF, Paul Jones, FDA, Lui Sha, University of Illinois</i>
4:00 – 4:30pm	Break
4:30 – 5:15pm	Medical Networks
4:30 – 4:45pm	Monitoring and Diagnosis of Networked Medical Hardware and Software for the Integrated Operating Room <i>S. Bohn, M. Lessnau, O. Burgert</i>
4:45 – 5:00pm	Wireless Health and the Smart Phone Conundrum <i>J. Woodbridge, A. Nahapetian, H. Noshadi, M. Sarrafzadeh, W. Kaiser</i>
5:00 – 5:15pm	Flexible RFID Location System Based on Artificial Neural Networks for Medical Care Facilities <i>H-J. Wu, Y-H. Chang, I-Ch. Lin, M-Sh. Hwang</i>
5:15 – 5:20pm	Workshop Wrap-up & Adjourn
5:20 – 6:00pm	Break / Mini-Reception
6:00 – 8:00pm	Clinical Requirements Session <i>Moderator: Julian M. Goldman, MD</i>