



AGENDA

NSF I/UCRC iPerform Industry Advisory Board Meeting

March 31, 2017

TI Auditorium, ECSS Building, 2.102 @ UT Dallas

8:30 AM – 5:20 PM

- 8:30 AM – 9:00 AM** **Participant Registration and Breakfast**
- 9:00 AM – 9:30 AM** **Welcome Remarks and Center Vision**
 Dr. Ovidiu Daescu (**UT Dallas Site Director**)
 Dr. Mark Spong (**Dean of Erik Jonsson School of Engineering & Computer Science**)
 Dr. Fillia Makedon (**Center Director and UT Arlington Site Director**)
- 9:30 AM – 10:00 AM** **Participant Introductions**
- 10:00 AM – 10:30 AM** **Presentation by NSF Center Evaluator**
 Dr. Dee Hoffman
- 10:30 AM – 10:50 AM** **Coffee Break**
- 10:50 AM – 12:10 PM** **Project Proposals – Round 1** *15-minute talk + 5 minutes for Q&A*
 - A. Designing Tactile Guidance Cues for 2D and 3D Computer-Assisted Tool Manipulation
Dr. Ann Majewicz (UTD), LIFE Form 1
 - B. Empowering Non-Programmers to Create Significant Software
Dr. Christoph Csallner (UTA), LIFE Form 2
 - C. Virtual Reality Development Framework
Dr. Ryan McMahan (UTD), LIFE Form 3
 - D. iWork: A Smart Service for Vocational Assessment and Personalized Training and Rehabilitation
Dr. Fillia Makedon and Mr. Kostas Tsiakas (UTA), LIFE Form 7
 - E. Presentation by **Dr. Taufiq Hasan of Bosch**
- 12:10 PM – 12:40 PM** **Lunch**
- 12:40 PM – 2:00 PM** **Project Proposals – Round 2** *15-minute talk + 5 minutes for Q&A*
 - F. High-Performance Actuators for Powered Prosthetic Legs
Dr. Robert Gregg (UTD), LIFE Form 4
 - G. Managing Data Growth Efficiently and Reliably in the Big Data Era
Mr. Zhichao Yan, Dr. Hong Jiang, and Dr. Zhije Huang (UTA), LIFE Form 5
 - H. Big Data Project: Building a 200TB Multimodal, Multisensing Human Activity Research Dataset
Dr. Vassilis Athitsos (UTA), LIFE Form 6
 - I. A Personalized Optimal Physical Training System Using Real-Time Biofeedback and Wearable Sensor Techniques
Dr. Shouyi Wang (UTA), LIFE Form 8
- 2:00 PM – 3:00 PM** **Poster Pitches, Poster Session, and Coffee Break**
- 3:00 PM – 4:00 PM** **Center Response to Proposed Project Feedback (LIFE Forms)**
- 4:00 PM – 4:45 PM** **Industry Tells Us What They're Interested In**
- 4:45 PM – 5:15 PM** **NSF Closed Session and Next Steps Discussion**
- 5:15 PM – 5:20 PM** **Closing Remarks**

iPerform Industry Members and Collaborators:

Agillaire, Inc.*
AT&T*
Barrett^
Bosch*
Dallas Veteran Affairs Research Corp. (VANTHCS)*
Demokritos – National Center for Scientific Research*
National Institute of Standards and Technology*
NetApp*
SPEETRA*
Texas Instruments*

* = active member

^ = research collaboration company

Companies in attendance at iPerform IAB 5:

- Oracle
- Baylor Scott & White Research Institute
- Topaz Labs, LLC
- Texas Workforce Commission
- Speetra
- Dallas VA Research Cooperation
- Bosch
- AT&T
- City of Dallas
- Foxconn

Wifi and LIFE Portal Info:

Wifi Network: UTDGuest

Steps to log in:

Open your preferred browser.

You should get to a Terms of User page.

(If not, enter this link into your browser: <https://guestwireless.utdallas.edu>)

Enter in the provided username and password.

Click **Submit**.

I/UCRC-LIFE Portal: www.iucrc.com

LIFE Portal Password: IAB5-2017

Representatives are recommended to bring their own laptops in order to access the LIFE forms online.

List of Posters:

- 1. MyoLearn – Using a Multimodal Armband Sensor for Vocational Safety Problem Identification**
Dylan Ebert (UTA)
- 2. Confusion Matrix Reduces Sleep Apnea Confusion**
Gautam Das, Amal Isaiah, Ron Mitchell, Saravanan Thirumuruganathan, Habibur Rahman, Sona Hasani, Mary Koone, and Sadia Ahmed (UTA)
- 3. A Mobile Powered Knee-Ankle Orthosis for Body-Weight Support**
Robert Gregg (UTD)
- 4. An Interactive Robot-Based Vocational and Assessment Game using Lego Assembly**
Chris Collander, Joseph Tompkins, Alexandros Lioulemes, Ali Sharifara, Michail Theofanidis, and Fillia Makedon (UTA)
- 5. VoTrE: A Vocational Training and Evaluation System to Compare Training Approaches for the Workplace**
Ashwin RameshBabu, Akilesh Rajavenkatanarayanan, Maher Abujelala, and Fillia Makedon (UTA)
- 6. Research on Unconventional Data Deduplication**
Zhichao Yan, Hong Jiang, Zhijie Huang, and Stan Skelton (UTA)
- 7. Objective Assessment of the Progression of Parkinson’s Disease by Analysis of Facial Displays**
Carlos Busso and Najmeh Sadoughi (UTD)
- 8. Tracking Long-Term Emotional Behaviors using Speech-Based Interfaces**
Srinivas Parthasarathy and Carlos Busso (UTD)
- 9. XI-Code: A Family of Practical Lowest Density MDS Array Codes of Distance 4**
Zhijie Huang, Hong Jiang, and Stan Skelton (UTA)
- 10. Combining Cognitive Assessments with a Virtual Box and Blocks Test**
Shawn N. Gieser, Joseph Tompkins, and Fillia Makedon (UTA)
- 11. Task Switching Assessment Using the Nao Robot and Box and Blocks**
Shawn N. Gieser, Joseph Tompkins, Ali Sharifara, and Fillia Makedon (UTA)
- 12. Data Analytics on Healthcare Systems**
Feng Liu & Shouyi Wang (UTA)