Reported to the Board of Trustees May 7, 2015

# **UI LABS UPDATE**

UNIVERSITY OF ILLINOIS BOARD OF TRUSTEES MAY 7, 2015



University of Illinois

OFFICE OF THE VICE PRESIDENT FOR RESEARCH



### **WELCOME**

to the First Issue of the UI LABS Quarterly Newsletter

2015 is set to be a great year for UI LABS, and that is thanks to all of the hard work and dedicated effort put forth by our many partner companies and organizations, as well as our entire staff, throughout all of last year.

For our first ever quarterly newsletter, we decided to take a look back at UI LABS' short, yet exciting journey from its creation to today.





**UI LABS Breaks Ground on New World-Class Facility** 





## **NEWSLETTER**

FEBRUARY 2015



Artist's image of DMDII's new home on Goose Island



Attendees networking at the first workshop in Chicago

DMDII ANNOUNCES SEVEN PROJECT CALLS AND SCHEDULES PUBLIC WORSHOP IN ATLANTA FEB. 25-26





## **DMDII** Project Calls

- Seven project calls released on January 21, 2015
- Total project investment: \$25M
   (\$12.5M government investment + \$12.5M cost share)
- Workshop held in Atlanta, GA, on February 25-26
- White papers received/due over the course of March-May 2015
- Projects will run for 12-24 months with transition to industry expected shortly after

Factory
Cybersecurity
Infrastructure
Assessment

Smart Factory
Visibility and
Real-Time
Optimization

Communication
Standards for
Intelligent
Machines

Shop Floor
Augmented Reality
and Wearable
Computing

Systems Design using the Digital
Thread

Operating System for Cyber-Physical Manufacturing

Virtually Guided
Certification





## You're living in a lab: Microsoft, Accenture, Siemens, UI Labs tinker with a new 'city that works' here

By JOHN PLETZ | 💆 🖇

SHARE

Argonne National Laboratory City of Chicago University of Chicago Rahm Emar





CityWorks will be based at UTL abs' headquarters on Goose Island, set to open this spring

Chicago, the city that works, will be the test subject in an experiment to create the city that

Microsoft, Accenture, Commonwealth Edison and Siemens are partnering with the city of Chicago to figure out how technology can help design and operate more efficient cities. The effort, called CityWorks, is the second major program for UI Labs, a Chicago-based research consortium between top universities and companies across the Midwest.

Launched two years ago, UI Labs is best known for its first project, a federally funded effort to develop next-generation manufacturing technology called the Digital Manufacturing and Design Innovation Institute.



#### THE CITY THAT WORKS

#### CityWorks R&D Lab Wants to Turn Chicago Into Urban Testbed



On the heels of the University of Chicago's \$1 million Innovation Challenge for urban policy solutions, today's announcement that UI Labs ("universities and industries") will open CityWorks, a private R&D partnership that will be based on Goose Island, sets up the city to be a center for urban studies, technology and innovations. Founding partners Microsoft, Accenture, ComEd and Siemens will operate a bit like angel investors, according to Jason Harris, a spokesman for UI Labs. This project will seek to "level up Chicago as a center for the built environment." The city's mix of university and industry partners, government leadership and legacy of architecture and design innovation place it in a perfect position for this kind of incubator, according to Harris.

GOOSE ISLAND CITYWORKS GOOSE ISLAND GOOSE ISLAND 2.0 THE CITY THAT WORKS UI LABS 4 COMMENTS f Like < 22







CityWorks will address challenges to the built environment and produce commercializable, scalable solutions in areas such as energy management, physical infrastructure, water and sanitation systems, and transportation and logistics systems.



#### ENERGY MANAGEMENT

Use of sensing technologies, data collection, and advanced diagnostics to optimize energy use, efficiency, availability, and reliability within large buildings and across entire neighborhoods. Includes building management systems, smart meters, micro grids, intelligent loads, and implications of electric vehicles and variable energy sources.



#### PHYSICAL INFRASTRUCTURE

Development and deployment of advanced sensing technologies and data analytics to provide information and guidance to improve monitoring of infrastructure use and condition; optimize investments, locations, and schedules for infrastructure construction, operation, and maintenance; and facilitate public safety/emergency management planning and communications.



#### TRANSPORTATION

Development and use of advanced technologies, data collection, and design to better monitor and manage congestion, optimize distribution systems and networks, enhance transportation safety, improve user experience, and expedite intermodal transport of freight and people.



#### WATER & SANITATION

Data collection, optical, acoustic, thermal and traditional sensing, and development of predictive capabilities to efficiently manage storm water and increase flood resilience. inform policies related to water quality and management, provide better pricing for flood-related insurance, and facilitate development and assessment of green/grey infrastructure technologies and policies.



# ILLINOIS MANUFACTURING LAB

<u>Mission</u>: Apply advanced technology to solve problems for Illinois manufacturers to enhance regional competitiveness

### Planned 2015 Activities:

- Establish IML Steering Committee
- Establish IML Working Group
- Cluster Development
- IML Workforce Development
- Student Engagement Program
- Collaboration between the University of Illinois and UI LABS





## GOOSE ISLAND FACILITY

## **OPENING MAY 11**

- Sneak peak in the Chicago Tribune
   March 29
- Received certificate of occupancy on April 13
- Full staff moved in on April 20
- Grand opening to take place on May 11 with participation from Senator Durbin, Governor Rauner, and Mayor Emanuel and many others
- Partner and community engagement activities will engage 600+ stakeholders during the first week







# FOR MORE INFORMATION:



