

# **CCC Content Generation For Workforce Training Workshop**

Georgia Tech Hotel and Conference Center Atlanta, GA

#### Thursday March 14th, 2019

#### 7:30 BREAKFAST

Conference Seven

## 8:30 Opening remarks and Introductions

Conference Four

# 9:00 Part I – State of Education/Training Technology Research

Conference Four

Presentations by *Educational Technology researchers* about the current cutting edge in incorporating technology in lifelong/workplace (rather than K-12 or university) education.

- 1. Carolina Cruz-Neira, University of Arkansas "Is VR the Future of Education?"
- 2. Kapil Chalil Madathil, Clemson University

#### 9:45 BREAK

Conference Break Station

### 10:00 Part II – State of Education/Training in Practice

Conference Four

Presentations by *Consumers of Education and Training* on programs that exist today, and challenges they face.

Presentations by *Producers of Educational/Training Materials* of the demand they see, and the tools they use.

- 1. Chuck Spangler, SCMEP
- 2. Erik Verlage, MIT- "Educational simulations and blended learning for workforce training in photonics"

#### 10:45 Part III – State of Content Authoring Research

Conference Four

Presentations by *Researchers in Content Authorship* of new ideas for authoring systems and components of systems.

- 1. Jessica Hodgins, CMU
- 2. Blair MacIntyre, Georgia Tech and Mozilla

#### 3. Steve Feiner, Columbia University

#### 11:45 LUNCH

Conference Seven

# 12:30 Part IV- High-level views of the challenges

Conference Four

Virtual- and Augmented-Reality based Workforce Development Platforms for Roboticsenabled Advanced Manufacturing Environments: A Perspective from the Advanced Robotics in Manufacturing Institute

Rebecca Hartley, ARM Institute

Combining the Virtual and Physical Worlds in Synthetic Learning Environments for Advanced Skill Training: Application, Adoption and Content Development

Maribeth Gandy, IMTC, Georgia Tech Paul M.A. Baker, CACP, Georgia Tech

# 1:30 Part V - Case Studies of applying VR/AR to training Conference Four

Virtual and Augmented Reality Enabled Personalized Manufacturing Training

Rajesh Jha, SimInsights

The Challenges and Opportunities of Designing AR to Support Complex Problem Solving

Louise Yarnall, SRI Education

Case Study in VR Content Generation for Clemson University Center for Workforce Development

Anand Gramopadhye, Clemson University Jeff Bertrand, Clemson University

### 2:30 BREAK

Conference Break Station

# 3:00 Part VI -- Research on Methods specifically aimed at Training Conference Four

Omnidirectional Cinemagraphs for Safety Training Eakta Jain, University of Florida Ad hoc Allocentric AR-Based Team Training with Human-in-the-Loop Avatars and Aware/Influential Agents

Greg Welch, University of Central Florida

Creating Novel VR Tools for Spatial Design Training via Learning from Human Perceptions and Behaviors in Virtual Simulated Workplaces

Lap-Fai Yu, George Mason University Tomer Weiss, University of California, Los Angeles Christos Mousas, Purdue University

4:00 Open discussion

Conference Four

- 4:30 Demo Field Trip
- 6:30 DINNER

Ecco Midtown Restaurant (40 7th St NE, Atlanta, GA)

## Friday, March 15th, 2019

7:30 BREAKFAST

Conference Seven

8:30 Recap Day 2

Conference Four

9:00 Part VII – Comparisons and Setting an Agenda

Conference Four

10:00 BREAK

Conference Break Station

10:30 Breakout Groups / Report Outlining

Conference Four

11:45 Report Back

Conference Four

12:00 LUNCH

Conference Seven

1:00 Report Writing

Conference Four

2:00 Meeting Ends