

# **Technology in Construction Symposium & Lab**

Tuesday, November 6, 2018

Register: 8:45 AM Program: 9 AM - 1 PM

Judicial Council of California, Veranda ABC, 2860 Gateway Oaks Dr. Suite 400, Sacramento, CA 95833

## HOW TO IMPLEMENT NEW IT IN YOUR ORGANIZATION

#### USING TECHNOLOGY IN CONSTRUCTION

#### Virtual Reality (VR) Uses - HTC Vive

- Preconstruction (owner experience)
- Design Coordination
- Safety (walkthrough project before building, Planning, Safety, Assess Risk)
- Communication (Visual communication, easy to use, inexpensive)

#### **Augmented Reality (Hololens) - Microsoft Hololens**

- Preconstruction (space and geometry awareness and speed up design)
- Quality Control (As-built ...)
- Walkthrough Underground Civil (mitigate utility hits)
- Walkthrough Construction Validation (compare coordinated model vs. installation
- FM data (view of Asset type parameters)

#### Laser Scanning - BLK 360

- Automated modeling
- Drones

#### Pattern-based Design

- Data
- Integration

#### Model Based Quantity Takeoff and Cost Estimating

- Speed up design review
  - ° Kit of Parts
  - Automated takeoff from conceptual design to construction
- Test fit out
- Trade engagement (lower contingency, better bid coverage and stronger bids)

#### **FM** Data

- What really works?
- Data Management

- QA/QC
- Dynamo for FM Data

#### **Owner Perspective**

Where we are today?

# How field Technology Is Used On Construction Projects Today

- Cases
- Current projects in the region

Benefits of Field Technology for Owners Q & A

► VIRTUAL REALITY LAB AFTER THE PRESENTATIONS

## **PRESENTERS:**

**Anu Saseendran**, MS, Senior Researcher School of Sustainable Engineering & The Built Environment, Arizona State University

#### **Patrick Krzyzosiak**

Director of Virtual Design Construction Rudolph and Sletten, Inc.

**Tad Costerison** AIA LEED AP NCARB Principal, A Design + Consulting

Joseph O'Toole, Project Manager Porter Consulting LLC

**Dylan Paul,** Associate Director University of California, Office of the President



#### **REGISTRATION FORM**

**SAVE: Bring your Team!** 

# Tuesday, November 6, 2018

Register: 8:45 AM Program: 9 AM - 1 PM

# **Technology in Construction Symposium & Lab**

HOSTED BY: Judicial Council of California 2860 Gateway Oaks, Dr., Suite 400, Veranda Rooms ABC Sacramento, CA 95833

> WCCC Member Single □ \$75 WCCC Member TEAM (3+) □ \$65 NON - Member Single □ \$89

**NON - Member <u>TEAM</u>** (3+) □ \$79

## **REGISTER NOW!** Deadline 11/2/18

▶ E-MAIL: vann@wccc.org (you may call in CC#)

PHONE: (916) 599-8020

▶ MAIL: Call or E-mail Reg Form THEN

Mail copy/team list/check postmarked by 10/26

To: Western Council of Construction Consumers 1731 Howe Ave. #613, Sacramento, CA 95825

► TEAMS: Complete Team List with all info for each registrant.

### **TEAM LIST**

Name	Phone:
Firm/ Agency:	
Name	
Firm/ Agency:	
Name	
Name	Phone:
Firm/ Agency:	
Title:	
Name	
Firm/ Agency:	
E-mail:	
Name	
	<u> </u>

REGISTRANT OR 🔲 TEAM CONTACT:	No-show:	No-shows & cancellations after <b>10/29/18</b> are subject to full fee. You may send Substitutes.				
Name	Title:	Cell:				
Firm/ Agency:		Wk. Ph:				
Address:						
Name on credit card:				Ехр:	Sec. <b>Code:</b>	
Billing Address:		# of Registrants:	X Fee \$	= \$	TOTAL DUE	
		PAYMENT METHOD: ☐ VISA ☐ MC ☐ Discover ☐ AMEX ☐ Check (Check #				
Signature:	/n 0 /2	(0.1				