

Home Presenters Sponsors

MONDAY, APRIL 15

8:00-12:00	ASCE Workshop: LIDAR to Machine: Automated 3D Infrastructure Construction and Management Colorado Hall C
10:00-3:00	ASTM Committee E57 on 3D Imaging Systems Colorado Hall F
1:00-3:00	Esri User Meeting: Smart 3D City Modeling From Start To Finish Colorado Hall B
2:00-5:00	IAFSM Bullet Trajectory Documentation Workshop
3:00-5:00	kubit User Workshop Colorado Hall C
3:00-4:00	Lightning Round: Latest from Universities Colorado Hall A Learn about what's coming out of universities and consider possible collaborations as participants share 10 minute presentations on their latest 3D work for a range of applications. Continue the conversation in the University Pavilion.
3:00-5:00	Pre-Conference Tutorial: Getting the Most Out of SPAR International 2013 Colorado Hall E/D Technology can be overwhelming; this session offers insight into prioritizing your time and asking the right questions. A review of the conference content will also help determine when you should shift focus from your own industry to learn new approaches from unexpected sources. <i>Presenters: Advisory Board Members Jody Lounsbury and Chris Zmijewski</i>
3:30-5:00	CO-MAPPS Chapter Meeting International Center South
5:00-6:00	Happy Hour – Exhibit Floor Sponsor:
6:00-7:00	USIBD Workshop: Development of Industry Standards for Building Documentation Colorado Hall B

TUESDAY, APRIL 16

8:00-7:00	Exhibits Open
8:00-9:00	Breakfast, Networking & Exhibits Sponsor:
9:00-11:00	OPENING & KEYNOTES International Center North Welcome Lisa Murray, Director, SPAR Point Group, Diversified Business Communications Keynotes - Michael Jones , Chief Technology Advocate, Google - Greg Bentley , CEO, Bentley Systems - Prof. (em) Heinz Ruther , Principal Investigator, Zamani Project

11:00-1:30	Lunch, Networking & Exhibits Sponsor:	11:00-3:30	TECHNICAL SEMINARS Colorado Hall C	LIVE DEMOS
------------	---	------------	--	-------------------

1:30-3:00	INDUSTRIAL FACILITIES Colorado Hall E/D New 3D Approaches for Industrial Inspection 3D models are providing the information engineers and budget-holders need to make critical decisions regarding component maintenance and repair, reducing overall cost of operations. - Aaron Blaisdell , Principal Surveyor, PACE Engineers - Marius Blom , Managing Director, Apply Capnor - Stephan Weiss , Technologist, Jet Propulsion Laboratory	CIVIL INFRASTRUCTURE Colorado Hall B End-to-End 3D Approaches Among DoTs Learn how each takes a different approach to 3D data capture through visualization and dissemination based on geography and other factors, and why. - Ron Singh , PLS, Geometronics Manager/Chief of Surveys, Oregon DoT - Bradley Canaday , Metro Surveys Manager, Minnesota DoT - Curtis Clabaugh , State Photogrammetry & Surveys Engineer, Wyoming DoT	FORENSIC & SECURITY Colorado Hall F Recreating Crime and Accident Scenes Compares methods of capture which vary widely in accuracy, usability, transportability, cost and other factors. - Christophe Lambert , Chief of Measure and Modelisation Unite, French Gendarmerie - Kirk McKinzie , Director of Fire and Explosion Services, Precision Simulations Inc. - Jim Wiethorn , Chairman of the Board/Principal Engineer, Haag Engineering	3D BOOT CAMP 101 FOR BEGINNERS International Center South Designed for those new to 3D imaging. Learn the basics of tools available and considerations for investing including various capture, processing and visualization applications. - Jody Lounsbury , 3DLS Manager, Clough Harbour & Associates - Allen Nobles , President, Nobles Consulting Group - Chris Zmijewski , Vice President, Haag 3D Solutions - Vince Zakrzewski , Senior Survey Project Manager, Langan	1:00 RIEGL USA Newest supplier advances and best practices.	2:00 Autodesk	3:00 FARO	>>>Read more.	Crime Scene 11:00 Z+F 11:30 Mantis Vision 12:00 Trimble 12:30 Autodesk 1:00 Crime Sciences 1:30 RIEGL USA Equipment Removal in an Industrial Facility 1:00 Trimble 1:30 Leica Geosystems 2:00 Z+F 3:00 Mantis Vision Measuring Progress on a Jobsite 1:00 Mantis Vision 1:30 Autodesk 2:00 3D Laser Mapping 2:30 Leica Geosystems 3:00 Trimble >>>Read more.
3:00-3:30	Coffee, Networking & Exhibits								

3:30-5:00

INDUSTRIAL FACILITIES

Colorado Hall E/D

Photogrammetry & LiDAR for As-Building

Includes the importance and the feasibility of open ditch as-built with photogrammetry and LiDAR, and contrasts with GPS surveying.

-Wayne Rodieck, Manager, Corporate Spatial Data, Anadarko Petroleum Corporation, and **Dr. Jan Van Sickle**, President, Van Sickle LLC

-Ken VanBree, Owner, eBuilds

-Paul E. Dorvel, Project Manager, Energy Consulting & Engineering Operation, SAIC

CIVIL INFRASTRUCTURE

Colorado Hall B

End-to-End 3D Approaches Among DoTs (continued)

Presentations continue with UT DoT's plan to solve the challenge of end-to-end data capture. Ends with discussion of what DoTs need from the industry.

-Stan Burns, Asset Management Director, Utah DOT

5 minute updates from: **John Caya**, Mandli Communications; **Kalvi Mani**, Virtual Geomatics; **Robert DeSanti**, Deighton Associates; **Tom Clemons**, Bentley Systems

Panel Discussion: Moderator **Jonathan Porter**, FHA

-Ron Singh, OR
-Bradley Canaday, MN
-Curtis Clabaugh, WY
-Stan Burns, UT

FORENSIC & SECURITY

Colorado Hall F

Admissibility of 3D Evidence

Frye/Daubert criteria will be applied to 3D imaging and how to present your data effectively in court as an expert witness.

-Dr. Damian Schofield, Director of Human Computer Interaction, State University of New York (Oswego)

-Jason Barr, Forensic Scientist, Institute of Environmental Science & Research

-Juliana Serna and **Nathan Render**, Detectives, Albuquerque Police Department

NEW TECHNOLOGIES

International Center South

Compact, Affordable 3D Capture Options

Digital cameras and other small devices are making news, and are excellent for certain situations. Participants share lessons learned from applications for capture to workflow and integration.

-Chris Slaughter, Founder and CEO, Lynx Laboratories

-Dr. Benjamin Braker, CTO, Chiaro Technologies LLC

TECHNICAL SEMINARS

Colorado Hall C

Newest supplier advances and best practices.

4:00 Surphaser

>>Read more.

GIS WORKSHOP I

Colorado Hall A

Participate in this instructor-led, hands-on workshop and learn how to manage and share LiDAR with GIS.

Sponsored by:



Registration required. >>Read more.

LIVE DEMOS

At scenarios around the facility, participants collect data using techniques including scanning, mobile surveying, photography.

Equipment Removal in an Industrial Facility
3:30 Autodesk

Indoor Mobile Mapping
3:30 Viametris
4:00 3D Laser Mapping
4:30 Autodesk

>>Read more.

5:00-7:00

Industry Reception - Exhibit Hall

Sponsor:



7:30

Dinner Roundtables – Golf Club Dining Room

New in 2013! Mix business with pleasure. Industry experts lead discussions on 6 hot topics over an elegant dinner with peers at one of the Broadmoor's private dining rooms. Space is limited. Reserve your place when you register to attend.

WEDNESDAY, APRIL 17

8:00-5:00

Exhibits Open

8:00-9:00

Breakfast, Networking & Exhibits

Sponsor:



9:00-10:30

INDUSTRIAL FACILITIES

Colorado Hall E/D

Managing Data Complexity, Capture to Processing

Includes accuracy, severability of the data, enterprise usage & handling of large file sizes, linking data to models, model validation, and plugging PC data directly into workflow.

- Amadeus M. Burger, President, CSA, Inc.

-Eric Hoffman, CEO, Quantapoint

-Joseph Chumbley, Senior Systems Engineer, Lockheed Martin Space Systems Co

BUILDING & ARCHITECTURE

Colorado Hall B

Improving Efficiency

Will examine best practices for using and integrating the most common tools for building and architecture, from capture to deliverable.

-Larry Kleinkemper, AIA, Owner, Lanmar Services

-Steven Schorr, President, and **Hugh B. Borbidge**, DJS Associates, Inc.

-Nadia Anis, AIA, Ferrari Moe, LLP

CIVIL INFRASTRUCTURE

Colorado Hall F

Large-Scale Infrastructure Projects: State of 3D Technology and What's Ahead

Which technologies are proving most successful for collecting and disseminating our state and national infrastructure information?

-Jim Brainard, Principal Surveyor, REY Engineers, Inc

-Chris Siebern, Senior Technologist, HNTB

-Michael Olsen, Assistant Professor, Oregon State University, **Gene V. Roe**, Managing Editor, LiDAR News

Brief Updates From:

-Nick Palatiello, MAPPS
-Rob Dingess, GTMA

NEW TECHNOLOGIES

International Center South

3D Printing Applied

The 3D deliverable is the new frontier. Learn new applications for collaboration and sharing the environment among multiple function groups.

-Phil Magenheim, 3DMTP USA

-Thad Wester, Founder, Clarity Scanning

-Michael Raphael, President & CEO, Direct Dimensions, Inc.

SUBTERRANEAN APPLICATIONS

Colorado Hall A

3D for Mining and Tunnels

These environments present unique challenges technologically and environmentally. Learn new approaches from capture to visualization.

-Andrew Chapman, Production Systems Engineer, Barrick Gold Corporation and **Mike Sekerka**, Chief Operating Officer, Neptec

-Timo Cronvall, Head of Design, VR Track Oy

TECHNICAL SEMINARS

Colorado Hall C

Newest supplier advances and best practices.

9:00 Z+F

10:00 Leica Geosystems

>>Read more.

LIVE DEMOS

At scenarios around the facility, participants collect data using techniques including scanning, mobile surveying, photography.

Measuring Progress on a Jobsite
10:00 Leica Geosystems
10:30 Mantis Vision

>>Read more.

10:30-11:00

Coffee, Networking & Exhibits

INDUSTRIAL FACILITIES
3D & Virtual Simulation for Operations & Maintenance; Crisis Management

Operators are acquiring new spatial awareness and orientation of facilities, learning SOPs, safe work practices and safety drills, prior to setting foot on the platform.

-Amir Anvar, R&D/Emerging Solutions Engineer, and **Christopher Fisher**, Upstream Workflow Transformation Engineer, Chevron

-Stephen Dudzik, Process, Automation & Concepts, PAC Ltd.

BUILDING & ARCHITECTURE: FUTURE TECHNOLOGIES
Colorado Hall B
Future of 3D Technology

An exciting look at what's ahead for architects and builders, and possibilities for integrating into the outside environment.

-Erin Rae Hoffer, AIA LEED BD+C, Industry Strategy, Autodesk Inc.

-Jerry Boyd, Project Manager, Merrick & Company

-Pat Carmichael, Manager of Advanced Technologies, HKS, Inc.

FORENSIC & SECURITY
Colorado Hall F
3D Visualization and Animation for Court Cases

Advances in 3D technology include virtual scenes which provide courts with information previously unattainable.

-Jason Barr, Forensic Scientist, Institute of Environmental Science & Research

-Joe Mullins, Forensic Imaging Specialist, National Center for Missing and Exploited Children

-Steven Schorr, President, and **Hugh B. Borbidge**, DJS Associates, Inc.

NEW TECHNOLOGIES
International Center South
Integrating Data from Multiple Sensors/Data Fusion

Learn how these tools are put into action for applications ranging from an international airport to the path of a tornado.

-Brian D. Bailey, Geospatial Services, Maser Consulting, and **Josh France**, Mobile Systems Segment Manager, Riegl USA

-Keith A. Warren, BIM/Visualization Manager, Associate, VTN Consulting

-Daniel Stonecipher, CEO & President, Immersivx and **Dennis Rodriguez**, Denver International Airport

TECHNICAL SEMINARS
Colorado Hall C
 Newest supplier advances and best practices.

11:00 **Trimble**

[>>Read more.](#)

GIS WORKSHOP II
Colorado Hall A
 Participate in this instructor-led, hands-on workshop on 3D Mapping

Sponsored by:



Registration required.
[>>Read more.](#)

LIVE DEMOS
 At scenarios around the facility, participants collect data using techniques including scanning, mobile surveying, photography.

Crime Scene
 12:30 FARO Technologies
 1:00 Leica Geosystems

Measuring Progress on a Jobsite
 11:00 3D Laser Mapping
 11:30 Autodesk
 1:00 Trimble

[>>Read more.](#)

12:30-2:00

Lunch, Networking & Exhibits

2:00-3:30

INDUSTRIAL FACILITIES & MANUFACTURING
Colorado Hall E/D
Short-Range and Reverse Engineering

Learn how the high accuracy of white, blue and red light scanning and reverse engineering has garnered a foothold in discrete manufacturing and is being applied in different ways.

-David Gagné, Vice President - Metrology and Engineering Services, Creaform

BUILDING & ARCHITECTURE
Colorado Hall B
Building Information Modeling (BIM)

Candid examination of acquiring accurate as-built documentation, meshing scan data with BIM, integrating FM for infrastructure including impact of BIM mandates in Europe.

-Kelly Cone, Director of Innovation, The Beck Group

-Darrell Wright, BIM Manager, Cobb Mechanical Contractors & **Greg Lawes**, Principal, Meridian Associates. *Co-Author: Jason Schroeder, BIM Coordinator, Hensel Phelps*

-Keith Roberts, Technology Manager, SSM Group, Inc.

FORENSIC & SECURITY
Colorado Hall F
3D-Based Investigation Workflows

While data capture is oft-discussed, work processes are not. This session looks at workflow requirements from capture to deliverable for criminal and security applications.

-David Dustin, President, Dustin Productions LLC

-Andre Stuart, CEO, 21st Century Forensic Animations

-Andrew Fredericks, Forensic Video Technician, Forensic Video Solutions

NEW TECHNOLOGIES & APPLICATIONS
International Center South
Unique Applications for 3D Imaging

Uses for visualizing data in 3D are constantly expanding, and often in industries you may not have considered. Discover new ways of thinking about problem-solving.

-Jeff White, FFX Supervisor, Industrial Light & Magic

-Stephan Weiss, Technologist, Jet Propulsion Laboratory

-Jan-Michael Frahm, Assistant Professor, University of North Carolina at Chapel Hill

TECHNICAL SEMINARS
Colorado Hall C
 Newest supplier advances and best practices.

2:00 **Optech**
 3:00 **Bentley Systems**

[>>Read more.](#)

LIVE DEMOS RESULTS
Colorado Hall A

Presentation of results for Live Demo:
 Equipment Removal in an Industrial Facility

[>>Read more.](#)

3:30-4:00

Coffee, Networking & Exhibits

4:00-5:30

UNDERWATER & BATHYMETRY
Colorado Hall F

Challenges, limitations, and benefits associated with using 3D photogrammetry and other underwater measurement technologies.

-Marie MacCormick, Lead 3D Projects Engineer, Welaptega Marine Limited

BUILDING & ARCHITECTURE
Colorado Hall B
Building Information Modeling (BIM)

Presentations are followed by a frank discussion of BIM lessons learned from each participant.

-Alexandra Grounds, Director of Applied BIM Technologies, Amtech Group

-Ken Smerz, CEO/President, Precision 3d Scanning and **Thai Nguyen**, National BIM Director, Hensel Phelps

Panel discussion led by **Birgitta Foster**, buildingSMART alliance
 Panelists: Ken Smerz; Thai Nguyen; Alexandra Grounds; Kelly Cone; Pat Carmichael; Larry Kleinkemper

DIGITAL HISTORIC PRESERVATION
Colorado Hall E/D
LiDAR and Photogrammetry; UAVs

Sites of historic importance are being digitally preserved using exciting new methods.

-Tom Noble, Bureau of Land Management – National Operations Center (NOC), and **Michael Nulty**, Documentation Coordinator, University of Colorado Denver

-Karel Pavelka, Professor, Czech Technical University, Prague

-Steven Schorr, President, and **Jon W. Adams**, DJS Associates, Inc.

NEW TECHNOLOGIES
International Center South
University-Company Collaborations, and Latest from Universities:

Content and panel discussions about university-company collaborations, latest from universities, and commercial applications.

-H. Scott Halliday, Navajo Technical College, and **Brandon Garrett**, Digital Design Manager, Dekker/Perich/Sabatini

Brief presentations from:
 Yonsei University
 Chalmers University of Technology
 University of South Florida
 University of Texas at Dallas

Panel discussion led by **Georgia Fotopolous**, Assoc. Professor, University of Texas at Dallas

TECHNICAL SEMINARS
Colorado Hall C
 Newest supplier advances and best practices.

4:00 **Topcon**
[>>Read more.](#)

FORENSIC & SECURITY
IARSM Best Practices Meeting
Colorado Hall A

8:00-12:00

Exhibits Open

8:00-9:00

Breakfast, Networking & Exhibits Sponsor:



9:00-10:30

INDUSTRIAL FACILITIES

International Center South

New Tools & Applications

Latest advances are shown and audience interaction encouraged.

-**Siro Kim**, Director of HDS Business Development, Wipco, Ltd.

- **Mike Sekerka**, Chief Operating Officer, Neptec

- **David Colleen**, CEO, Planet 9 Studios

CIVIL INFRASTRUCTURE

Colorado Hall B

Complex 3D Projects in Urban Environments

Using different technologies including above and below ground, infrared and integrating these pieces is the focus of this session.

-**Kourosh Langari**, Senior Project Engineer, URS Corporation

-**Marco Vidali Castillo**, BIM Director, ICA

-**Michael Twohig**, Advanced Utility Locating & Mapping Consultant, DGT Survey Group

DIGITAL HISTORIC PRESERVATION

Colorado Hall E/D

Case Studies

Selected examples of 3D applied to preserving our collective heritage will inspire and educate.

-**John D. Meneely**, School of Geography, Archaeology and Palaeoecology, Queens University Belfast

-**Lori Collins**, Ph.D., Research Assistant Professor/Director, Alliance for Integrated Spatial Technologies, University of South Florida

-**Trevor Pasika**, 3DLS Project Manager, Stantec

FORENSIC & SECURITY

Colorado Hall F

Presentation of Results for Mock Crime Scene

The CSI world has much to share with outside industry, as can be seen in the approaches to industrial accidents.

LIVE DEMOS RESULTS

Colorado Hall A

Presentation of results for Live Demo:

Measuring Progress on a Job Site

[>>Read more.](#)

10:30-10:45

Break

10:45-11:45

INDOOR MOBILE MAPPING DEMOS

Colorado Hall A

Attendees will have seen the mobile mappers and handheld units in action throughout the conference. This session will show the captured data and deliverables.

-**Dr. Aaron Morris**, Product Manager, Reality Capture Group, Autodesk

-**Sam Billingsley**, VP, Business & Product Development, SmartGeoMetrics

-**John Arnold**, VP-North America, 3D Laser Mapping

CIVIL INFRASTRUCTURE

Colorado Hall B

3D/4D GIS

Pavement management, forestry and other applications demonstrate what's possible for 3D GIS and beyond.

- **Kevin Gilson**, Project Visualization, Parsons Brinckerhoff

- **Mike Maylone**, Product Manager, Intermap Technologies and **Patrick Cunningham**, President, Blue Marble Geographics

DIGITAL HISTORIC PRESERVATION

Colorado Hall E/D

Disseminating 3D Data Among Multiple Users

The power is in the deliverable, and this session explores latest visualization applications.

-**Russell Gibb**, Managing Director, Geometria Limited

-**Dr. Herbert Maschner**, Director and Professor, Idaho Museum of Natural History

NEW TECHNOLOGIES

International Center South

Open Source: Update and What's Ahead

Learn about progress in the world of Point Cloud Library (PCL).

-**David Boardman**, CEO, URC Ventures

11:50-12:30

End-User Wrap-Up **Colorado Hall B**

Numerous technologies and applications will have been explored throughout the conference. Which technologies are of particular interest to end users and why? How have your own plans changed for future technology investments? End users will share views based on their needs, don't miss it!

Post-Conference

Workshops & Meetings

12:30-1:30

IAFSM Business Meeting **Colorado Hall F**

**Schedule subject to change*