



# AUTODESK UNIVERSITY 2015

AV11965

## The Next Big Thing: Impactful Developments in the Future of Visualization

**Paul Doherty** - Architect, the digit group, inc.

**Carlos Cristerna** - Visualization Designer, Neoscape, Inc.

**Jeff Mottle** - CEO, CGarchitect Digital Media Corp.

**Jorge Barrero** - Architect, Gensler

### Learning Objectives

- Learn about new technologies like augmented reality, virtual reality, real time, cloud, GPU and the impact they have on the future of visualization
- Learn about the role of visualization artists in the field and how their positions might change in the future
- Learn about current design and visualization pipelines and what advances need to happen to sync with future design processes
- Learn about new opportunities for visualization artists and studios that may come out of new developments in technology

### Description

As the 3D architectural visualization industry approaches almost 25 years, we can look back with amazement at the many developments in technology and workflow that have contributed to the rapid growth of the field, both creatively and technologically. Although recent years have seen only more incremental change, recent developments in AR, virtual reality, graphics processing unit, real time, cloud, and smart cities, to name just a few, have positioned us on the cusp of potentially major advances that could impact the future of the industry. Panelists will speak about what they believe to be the next big things to impact the future of the architectural visualization industry. Panelists will include Paul Doherty (the digit group, inc.) a leading expert in smart cities and visualization; Jorge Barrero (M. Arthur Gensler Jr. & Associates, Inc.), senior associate; Carlos Cristerna, visualization director at Neoscape, Inc.; and moderator Jeff Mottle, CEO of CGarchitect.com.

## Your AU Experts

**Paul Doherty - Architect, the digit group, inc. - [www.thedigitgroupinc.com](http://www.thedigitgroupinc.com)**

Paul Doherty is the president and CEO of the digit group, inc., a company that designs, builds, and manages Smart Cities. Paul is one of the global industries' most sought-after thought leaders, strategists, and integrators of process, technology, and business. He is an author, educator, analyst, and advisor to Fortune 500 organizations, global government agencies, prominent institutions, and the most prestigious architectural, engineering, and contracting firms in the world. A former Fortune 500 corporate officer, Paul is a licensed architect who is currently working on Smart Cities projects in Saudi Arabia, the United Arab Emirates, Malaysia, India, and China. Concurrently, Paul is the co-founder and producer of the architecture, engineering, and construction (AEC) Hackathon that launched at Facebook headquarters, and he's writing a series of whitepapers on Smart Cities for McGraw-Hill Financial (Standard & Poor's Ratings Services).

**Carlos Cristerna - Visualization Designer, Neoscape, Inc. - [www.neoscape.com](http://www.neoscape.com)**

With Neoscape, Inc., since 2005, Carlos Cristerna leads the studio's 3D Visualization Teams. As visualization director, Carlos oversees Neoscape's digital artists, constantly pushing technological, creative, and artistic limits to achieve the most beautiful and powerful work possible. His decade of experience encompasses everything from architecture, design, photography, and film, and provides him with an enviable skill set that makes him an oft-sought-after industry panelist and finalist for multiple architectural illustration awards annually. Carlos was recently elected vice president of the American Society of Architectural Illustrators (ASAI), and he also served as a judge for last year's CGArchitect annual 3D Awards. Carlos received the ASAI Award of Excellence in 2009, and in 2010 his work was recognized with the ASAI Formal Award. Carlos graduated with a bachelor of architecture from the Universidad Autonoma de Sinaloa, Mexico.

**Jorge Barrero - Architect, Gensler - [www.gensler.com](http://www.gensler.com)**

Jorge Barrero is a senior architectural designer and digital design leader for M. Arthur Gensler Jr. & Associates, Inc. (Gensler). He has 17 years of experience in the architecture and design visualization industry. He has taught a digital visualization studio at Harrington College of Design. He's been a word contributor to 3D World Magazine published in the United Kingdom, and his visualization work has been published in the EXPOSE digital art book series published in Australia. He's been a speaker at SIGGRAPH and Vismasters Design, Modeling, and Visualization conferences. As leader of Gensler's visualization community, he leads the effort to explore and implement new digital design tools for the firm.

**Jeff Mottle - Founder, [CGarchitect.com](http://CGarchitect.com) - [www.cgarchitect.com](http://www.cgarchitect.com)**

Jeff Mottle is the Founder of CGArchitect Digital Media Corporation ([www.cgarchitect.com](http://www.cgarchitect.com)), the leading online magazine and user community for architectural visualization professionals. He also co-founded the CGschool, that caters exclusively to architectural visualization professionals. Having worked in the

industry since 1996, Jeff has been involved in developing and speaking at conferences around the world. He is immersed in many areas of the industry and actively pursues initiatives that help promote the growth of the field, including CGarchitect's yearly Architectural Visualization competition and 3D Awards.

## **LINKS**

### **The Digit Group**

JSON <http://www.json.org/>  
geoJSON <http://geojson.org/>  
WebGL <https://www.khronos.org/webgl/>  
WebGL [https://developer.mozilla.org/en-US/docs/Web/API/WebGL\\_API](https://developer.mozilla.org/en-US/docs/Web/API/WebGL_API)  
COLLADA <https://www.khronos.org/collada/>  
glTF <https://www.khronos.org/glTF>

### **Gensler**

<http://www.gensleron.com/fifty-on/2015/11/2/how-virtual-and-augmented-reality-can-shape-architecture-and.html>

[http://on-demand.gputechconf.com/siggraph/2015/video/SIG540-Jeff-Mottle-Peter-De\\_Lappe-Scott-De-Woody.html](http://on-demand.gputechconf.com/siggraph/2015/video/SIG540-Jeff-Mottle-Peter-De_Lappe-Scott-De-Woody.html)

<http://www.nvidia.com/object/siggraph2015-theater.html>

<https://labs.chaosgroup.com/index.php/cg-garage-podcast/cg-garage-podcast-38-scott-dewoody-and-alan-robles/>

<http://www.cgarchitect.com/2015/01/a-conversation-during-aia-2014>