The 16th International Conference on
Construction Applications of Virtual Reality
Date: 11-13 December 2016
Venue: Regal Kowloon Hotel, Tsim Sha Tsui, Hong Kong

Introduction

The International Conference on Construction Applications of Virtual Reality (CONVR) is one of the leading international conferences in the areas of building information modeling (BIM), virtual reality (VR), augmented reality (AR), and Construction IT. The conference is also known for having a unique blend of participants from both academia and industry in the architecture, engineering, construction and operation (AECO) industry. The annual conference has been organized in different regions such as UK, USA, Australia, Japan, Canada, UAE and Taiwan since 2000. It is the first time the conference is organized in Hong Kong or in China.

Jointly organized by the Hong Kong University of Science and Technology and Teesside University this year, CONVR 2016 will be held in Hong Kong and will bring together AECO researchers and practitioners from around the globe to report on and exchange the latest development, ideas and applications, stemming from innovative research activities in the area of BIM, VR, AR, and other Construction IT technologies. Besides several exciting keynote presentations, over 50 peer-reviewed papers will be presented in parallel sessions. There will also be social events (conference reception and banquet), mini-symposiums, and technical visits in the conference.


Academic Keynote Speakers

Prof. Kincho H. Law
Professor, Civil and Environmental Engineering, Engineering Informatics Group
Stanford University, USA

Prof. Chimay J. Anumba
Dean, College of Design, Construction and Planning
University of Florida, USA

Prof. Lucio Soibelman
Professor and Chair, Sonny Astani Department of Civil and Environmental Engineering
University of Southern California, USA

Prof. Xiangyu Wang
Curtin Director of Australasian Joint Research Centre for Building Information Modelling (BIM), Department of Construction Management
Curtin University, Australia

Prof. Calvin Kam
Adjunct Professor, Center for Integrated Facility Engineering (CIFE)
Stanford University, USA

Prof. Rafael Sacks
Associate Professor, Civil and Environmental engineering
Israel Institute of Technology, Israel

Industry Keynote Speakers

Ms. Ada Fung
Deputy Director of Housing (Development & Construction)
Hong Kong Housing Authority, Hong Kong

Ir Kevin Poole
Executive Director
Hong Kong Airport Authority, Hong Kong

Mr. Tai Fatt Cheng
Deputy Managing Director, BCAA and BERII
Building and Construction Authority, Singapore

Mr. Kuang Jiazhi
General Manager (Department of Architectural Digitalization and BIM), China Construction Digital International, China
Topics

Topics include but not limited to:

- Building Information Modeling (BIM)
- Virtual Reality (VR) and Augmented Reality (AR) in AECO Applications
- Simulation and Automated Approaches in Construction
- Design and Construction Visualization
- 3D Geographic Information Systems (GIS)
- Collaborative Visual and Augmented Environments
- Interactive Media Environments
- Lifecycle Information and Knowledge Management
- Ontologies for Modeling and Visualization
- Mobile and Wearable Computing
- Green and Smart Buildings

Supporting Organizations
# PROGRAM

### 11 Dec 2016, Sunday

<table>
<thead>
<tr>
<th>Time</th>
<th>Venue: TBD</th>
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<tr>
<td>17:00 – 19:00</td>
<td>Registration</td>
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<tr>
<td>18:00 – 20:00</td>
<td>Pre-Conference Reception</td>
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### 12 Dec 2016, Monday

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<tr>
<th>Time</th>
<th>Venue: Versailles (3/F)</th>
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<tbody>
<tr>
<td>08:30 – 09:00</td>
<td>Registration</td>
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<tr>
<td>09:00 – 09:20</td>
<td>Opening Ceremony</td>
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| 09:20 – 10:20 | Keynote Presentations:  
 Recent BIM Developments in Hong Kong & How We Can All Play A Part  
 Ms. Ada Fung (Hong Kong Housing Authority, Hong Kong)  
 Applications of Computing and AI in Engineering  
 Prof. Kincho H. Law (Stanford University, USA) |
| 10:20 – 10:40 | Tea Break |
| 10:40 – 12:10 | Keynote Presentations:  
 BIM and IT in Construction – The Research to Practice Gap  
 Prof. Lucio Soibelman (University of Southern California, USA)  
 Implementing Intelligent Semantic Enrichment – the SeeBridge Project  
 Prof. Rafael Sacks (Israel Institute of Technology, Israel)  
 Building BIM Capacity in Singapore  
 Mr. Tai Fatt Cheng (Building and Construction Authority, Singapore) |
| 12:10 – 12:20 | Group Photo |
| 12:20 – 13:40 | Luncheon |
| 13:40 – 15:10 | Session I-A  
 Theme: BIM Adoption and Project Management  
 Session I-B  
 Theme: Laser Scanning and Photogrammetry  
 Mini-Symposium I  
 Theme: Sharing of BIM Cases |
| 15:10 – 15:30 | Tea Break |
| 15:30 – 17:00 | Session II-A  
 Theme: Computer Vision and UAV  
 Session II-B  
 Theme: Data Visualization and VR  
 Session II-C  
 Theme: BIM, VR and AR for Construction and Safety (I) |
| 17:00 – 22:00 | Conference Banquet with Tour |
### 13 Dec 2016, Tuesday

<table>
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<tr>
<th>Time</th>
<th>Venue: Versailles (3/F)</th>
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| 09:00 – 10:30 | **Keynote Presentations:**  
|             | *BIM Technology Enabled Smart Airport Design and VR Applications in Third Runway Development*  
|             | **Ir Kevin Poole** (Hong Kong Airport Authority, Hong Kong)  
|             | *Cyber-Physical Systems in Construction – Development Lessons and Future Directions*  
|             | **Prof. Chimay J. Anumba** (University of Florida, USA)  
|             | *Global VDC Adoption – Insights into Best Practices and Challenges*  
|             | **Prof. Calvin Kam** (Stanford University, USA)  
| 10:30 – 10:50 | Tea Break |
| 10:50 – 12:20 | **Keynote Presentations:**  
|             | *Towards Smart Industry in Construction: a Pathway of Converging Research*  
|             | **Prof. Xiangyu Wang** (Curtin University, Australia)  
|             | *Integrated Management of BIM Design and Construction in Mainland China*  
|             | **Mr. Jiazhi Kuang** (China Construction Digital International, China)  
| 12:20 – 13:40 | Luncheon |

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<tr>
<th>Time</th>
<th>Tivoli (3/F)</th>
<th>Luxembourg (3/F)</th>
<th>Versailles (3/F)</th>
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</table>
| 13:40 – 15:10 | Session III-A  
|             | *Theme: BIM for Design, Manufacturing and FM*  
| 15:10 – 15:30 | Tea Break |
| 15:30 – 17:00 | Session IV-A  
|             | *Theme: Big Data and IT in Construction*  
| 17:00 – 17:15 | Closing Ceremony |

### 14 Dec 2016, Wednesday

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<tr>
<th>Time</th>
<th>Technical Visits</th>
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| 09:00 – 12:30 | (Optional) Technical Visit 1 – Zero Carbon Building and CIC BIM Center*  
| 14:00 – 17:30 | (Optional) Technical Visit 2 – Xiqu Center*  

*Technical Visits: Free transportations from and back to the Regal Kowloon Hotel will be provided upon successful registration.*