

CONR 2018 Programme

Wednesday 21 November 2018

5:00 - 6:00pm Registration Open and Welcome Function Science Foyer 302-G60 & 80

8:30 - 9:00am Registration Open

9:00 - 9:15am Conference Welcome and Opening (Robert Amor) Medium Chemistry 301-G053

9:15 - 10:15am Keynote: Prof. John Messner - Smart and Connected Digital Community Models - Leveraging Digital Models to Drive Decisions

10:15 - 10:45am Morning Tea Science Foyer 302-G60 & 80

	AR-VR (Claudio Mourgues) Medium Chemistry 301-G053	Sensing and AI (Nash Dawood) Case Room 302-G20
10:45 - 11:05am	AR for Data Intensive Workflows (Dermott McMeel)	A Transfer Learning Method for Deep Neural Network Annotation of Construction Site Imagery (Nipun Nath, Theodora Chaspari and Amir Behzadan)
11:05 - 11:25am	Virtual Reality Simulator for Construction Workers' Musculoskeletal Disorders Prevention (Mehdi Hafsia, Eric Monacelli, Olivier Rabreau, Shouyang Dong and Hugo Martin)	Development of Human Pose Using Hybrid Motion Tracking System (Wenjing Chu, Sanghyeok Han and Zhenhua Zhu)
11:25 - 11:45am	Posture Estimation of Construction Equipment For Construction Site Safety Using Computer Vision Techniques (Han Luo, Haoqian Zhang, Mingzhu Wang and Jack C.P. Cheng)	Visualization of Physical Barrier for Wheelchair Users Using Depth Imaging (Rio Takahashi, Shinnosuke Matsushita, Hiroshige Dan and Yoshihiro Yasumuro)
11:45am - 12:05pm	Which Is It - Augmented-, Mixed-, Or Virtual Reality? A Meta-Analysis of Terminology in Recent Research (Imad Abdul Khalek, Jad Chalhoub and Steven Ayer)	Enhance Blind Lift Safety by Real-Time Sensing and Visualization (Yihai Fang, Jing Dao Chen, Yong Cho, Sijie Zhang and Esau Perez)
12:05 - 12:25pm	Markerless AR Approach with Laser Scan Data for Visualizing Inundation Prediction in Underground Spaces (Makoto Hirose, Hiroshige Dan, Satoshi Kubota, Taira Ozaki, Taisuke Ishigaki and Yoshihiro Yasumuro)	A Review of the Applications of Computer Vision to Construction Health and Safety (Brian H. W. Guo, Yang Zou and Long Chen)

12:30 - 1:30pm Lunch Break Science Foyer 302-G60 & 80

	AR-VR (Nobuyoshi Yabuki) Medium Chemistry 301-G053	BIM & GIS Knowledge & Theory Frameworks Case Room 302-G20
1:30 - 1:50pm	Virtual Reality Based Studies of Human Emergency Behavior in Built Environments: A Systematic Review (Runhe Zhu, Jing Lin, Burcin Becerik-Gerber and Nan Li)	Improving Student Understanding of Construction Terms and Techniques Using Annotated Digital Models (Malachy McGarrigle)
1:50 - 2:10pm	VR Based Assessment of Effects of Gender and Stress on Indoor Wayfinding During Building Emergencies (Jing Lin, Nan Li and Dongping Fang)	Developing a Location Aware Augmented Reality Collaboration System for Facility Maintenance Management Based on BIM (Jack C. P. Cheng, Keyu Chen, Weiwei Chen and Chun Ting Li)
2:10 - 2:30pm	Rapid 3D Reconstruction of Indoor Environments to Generate Virtual Reality Serious Games Scenarios (Zhenan Feng, Vicente Gonzalez, Ling Ma, Mustafa Al-Adhami and Claudio Mourgues)	Knowledge Management With 3D Models Simulation For Seawall Construction Project in Thailand (Petcharat Limsupreeyarat, Unchisa Maneewong, Waraporn Tinglek and Chairerg Jakpattanajit)
2:30 - 2:50pm	Potential for Virtual Reality and Haptic Feedback To Enhance Learning Outcomes Among Construction Workers (Karan Patil, Siddharth Bhandari, Steven K. Ayer and Matthew R. Hallowell)	Smart Work Packages for Constraints Management in Modular Integrated Construction (Xiao Li, Qiping Shen, Lizi Luo, Fan Xue and Hung-Lin Chi)

3:00 - 3:30pm Afternoon Tea Science Foyer 302-G60 & 80

	AR-VR (John Messner) Medium Chemistry 301-G053	BIM & GIS (Robin Drogemuller) Case Room 302-G20
3:30 - 3:50pm	A New Approach To Testing Augmented- and Virtual- Reality To Support Tacit Knowledge Generation in Design Assessment (Justin Hartless, Steven Ayer, Jeremi London, Wei Wu, Christina Lam and Jessica Borders)	Information Delivery Manual (IDM) Configurator: Previous Efforts and Future Work (Kahyun Jeon and Ghang Lee)
3:50 - 4:10pm	Comparing Perceptions of Occupant Flow and Space Functionality in a Virtual Reality and Actual Space (Andrew Windham and Fangxiao Liu)	Using the Rate of Color Evolution of A Point Cloud To Monitoring the Performance of Construction Trades (Eyob Mengiste and Borja Garcia de Soto)
4:10 - 4:30pm	Smart Inspection: Documenting Issues in 3D With Augmented Reality (Robert Rost, Axel Friedewald and Niklas Jahn)	Towards Automated Generation of Parametric BIM For Steel Structures Based on Laser Scanning Data (Jack C.P. Cheng, Liu Yang and Qian Wang)
4:30 - 4:50pm	I-Tracker: An In-Situ Intervention for Spatial Temporal Cognitive Ability Development (Ivan Mutis, Shashank Yammanur and Pranav Sai Deenumsetti)	From BIM to VR: Defining a Level of Detail to Guide Virtual Reality Narratives (Katie Graham, Lara Chow and Stephen Fai)

6:20pm Meet at registration desk to be taken to bus

6:30pm Bus departs sharp from Science Centre to Gracehill Vineyard

9:30pm Bus departs sharp from Gracehill Vineyard to Science Centre

Thursday, 22 November 2018

