

May 31, 2016- 2:30pm -4:00 pm

Track: Data Sensing and Analysis (Room 201-A)			
Moderator: Mario Berges			
Time	Paper ID	Title	Authors
2:30	258	A Framework For Automated Pavement Condition Monitoring	Stefania C. Radopoulou, Ioannis Brilakis, Kristina Doycheva, Christian Koch
2:45	448	Accuracy Comparison Of 3D Structural Models Produced Via Close-Range Photogrammetry And Laser Scanning	Marcel Maghiar, Gustavo Maldonado, Sam Newsome, Jerome Clendenen, Mike Jackson
3:00	470	Action Recognition Using Accelerometers On Wearable And Mobile Devices: Case Study Of Masonry Work	Juhyeong Ryu, Joonoh Seo, Meiyin Liu, Sanghyun Lee, Carl Haas
3:15	11	Analysis Of Runway Pavement Distress Using Embedded Instrumentation	Amarjit Singh, Thin Thin Swe, Karissa Cook
3:30	607	Automated Postural Ergonomic Assessment Using Computer Vision-Based Posture Classification	Joonoh Seo, Sanghyun Lee, Kaiqi Yin
3:45	500	Automatic Correlated Vibration Pattern Analysis For Rapid Remote Scour Assessment Of Civil Infrastructures	Vamsi Sai Kalasapudi, Pingbo Tang, Jing Du

May 31, 2016- 2:30pm -4:00 pm

Track: CII Research (Room 201-B)			
Moderator: Robert Leicht			
Time	Paper ID	Title	Authors
2:30	347	Analysis Of Criticality And Frequency Of Alignment Elements In Project Execution Plans	Xiaopeng Liang, William O'Brien
2:45	164	Comparison Of Front End Planning Practices For Small And Large Industrial Construction Projects	Wesley Collins, Kristen Parrish, Edd Gibson
3:00	335	Defining Small Projects In Developing The Pdri For Small Infrastructure Projects	Rebekah Burke, Kristen Parrish, G. Edward Gibson
3:15	290	Flash Track Practices Distilled Via Structured Interviews From Epc Projects	Pardis Pishdad-Bozorgi, Robert Austin, Jesus De La Garza
3:30	25	Investigating Impacts, Drivers And Leading Indicators Of Premature Starts To Construction	Ryan Griego, Fernanda Leite
3:45	182	Metrics That Matter: Evaluation Of Metrics And Indicators For Project Progress Measurement, Performance Assessment, And Performance Forecasting During Construction	Resulali Orgut, Mostafa Batouli, Jin Zhu, Ali Mostafavi, Edward Jaselskis

May 31, 2016- 2:30pm -4:00 pm

Track: Safety and Risk Management (Room 202-A)			
Moderator: Eric Marks			
Time	Paper ID	Title	Authors
2:30	181	A Risk Registry For Renegotiation In Public Private Partnerships (Ppp) Projects: Iqram-Ppp	Rana Khallaf, Nader Naderpajouh, Makarand Hastak
2:45	234	An Agent-Based Framework For Simulating Contractors' Safety Behavior	Ralph Tayeh, Rita Awwad, Caesar Abi Shdid
3:00	118	An Exploratory Study To Assess The Construction Safety Culture And Safety Training Needs In Puerto Rico	Eddie Rivera, Carla Lopez Del Puerto
3:15	595	Applying Classification Trees To Analyze Electrical Contractors' Accidents	Pouya Gholizadeh, Behzad Esmaeili
3:30	218	Bim-Based Optimization Of Scaffolding Plans For Safety	Kyungki Kim, Yong Cho, Young Hoon Kwak
3:45	74	Brain-Computer Interface In Construction Safety Management: A Quantitative Framework	Jiayu Chen, Xinyi Song

May 31, 2016- 2:30pm -4:00 pm

Track: Quantitative Methods, BIM and Simulation (Room 202-B)			
Moderator: Caroline Clevenger			
Time	Paper ID	Title	Authors
2:30	623	A Case Study For Improving Bim-Fm Handover For A Large Educational Institution	Walid Thabet, Jason Lucas
2:45	143	A Framework Of Site Safety Assessment Model Using Statistical 4D Bim-Based Spatial-Temporal Collision Detection	Zhexiong Shang, Zhigang Shen
3:00	439	Automated Planning Of Building Construction Considering The Amount Of Available Floor Formwork	Sina Mohammadi, Mehdi Tavakolan, Banafsheh Zahraie
3:15	493	Automated Recognition Of Unlabeled Items In Bim Models	Mostafa Ali, Yasser Mohamed, Rick Hermann
3:30	492	Automation Of Construction Quantity Take-Off: Using Building Information Modeling (Bim)	Hosein Taghaddos, Ali Mashayekhi, Behnam Sherafat
3:45	366	Bim Scientific Literature Review For Existing Buildings And Theoretical Method Proposal For Heritage Data Management Using Hbim	Jorge Garcia Valdecabres, Eugenio Pellicer, Isabel Jordán

May 31, 2016- 2:30pm -4:00 pm

Track: Environmentally Sustainable Design and Construction (Room 202-C)			
Moderator: Annie Pierce			
Time	Paper ID	Title	Authors
2:30	277	A Case Study Of Occupancy-Based Energy Audit Model For Hotel Buildings	Yujie Lu
2:45	405	A Framework For Assessment Of Energy Use Of High-Rise Building Construction Processes	L. Pinky Devi and Sivakumar Palaniappan
3:00	485	A Lifecycle Cost-Benefit Analysis Of Low-Carbon Powerhouses In Buildings In China	Rebecca Yang, Andrew Carre, Usha Iyer-Raniga, Patrick Zou, Ning Xu, Shenzhen, Ximeng Ma
3:15	559	A Methodology To Model Occupants' Lighting Quality Satisfaction In Residential Building	Somayeh Asadi, Ehsan Mostavi
3:30	23	A Novel Modeling Approach To Assess Electricity Consumption Of Leed Certified Research Buildings Using Big Data Predictive Methods	Abbas Chokor, Mounir El Asmar
3:45	338	Leverage Points For Sustainability: Targeting Stakeholders, Innovations, And Decision Types Of Maximal Influence	Annie Pearce, Pratik Doshi, Margaret Carneal

May 31, 2016- 2:30pm -4:00 pm

Track: Infrastructure and Disaster Management (Room 203)			
Moderator: Ingrid Arocho			
Time	Paper ID	Title	Authors
2:30	483	A Bayesian Networks-Based Risk Assessment Framework For The Impact Of Climate Change On Infrastructures	Tao Wang, Xiaoming Wang
2:45	301	An Infrastructure Maintenance Funding Framework For A Transportation Agency	Ali Almalki, William Rasdorf, Jonathan Arnold, Charles Pilson, Matthew Whitley
3:00	363	A Hybrid Integrated Assessment For The Selection Of Flood Mitigation Alternatives	Natalia Sanabria, Vanessa Valentin
3:15	390	A Conceptual Framework For Alternative Assessment In Front-End Phase Of Major Transportation Projects	Nahid Vesali Mahmoud, Mehmet Bayraktar, Halit Ozen
3:30	606	A Framework For Inter-Connection Of Life-Cycle Highway Data Islands	Tuyen Le, David Jeong
3:45	40	A Framework Of Color-Coded Indoor Wayfinding Assistance	Xing Su, Aaron Haverfield, Siue Jing Pan

May 31, 2016- 2:30pm -4:00 pm

Track: Planning and Control (Room 204)			
Moderator: Mohamed Eid			
Time	Paper ID	Title	Authors
2:30	343	A Construction Workflow Model For Analyzing The Impact Of In-Project Variability	Nelly Garcia-Lopez, Martin Fischer
2:45	611	Temporary Suspension Of Construction Projects	Francisco Matienzo
3:00	16	A Unified Quantitative Model For Project Management With Singularity Functions	Yi Su, Gunnar Lucko
3:15	419	An Empirical Comparison Of Cost Growth Between Highway Design-Bid-Build And Design-Build Projects By Project Size	Daniel Tran, J. Cameron Lampe, Sai Pavan Kumar Bypaneni, Keith Molenaar
3:30	373	Assessing Cost Forecasting Performance In Construction Projects Through Data Envelopment Analysis	Guillermo Mejia A., Diana Franco D.
3:45	200	Automating The Administration Process In Highway Construction Projects	Josie Bianchi, Jose Perdomo, Tarik Calderon, Julio Valdes, Didier Valdes



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May 31, 2016- 4:15pm -5:45 pm

Track: Data Sensing and Analysis (Room 201-A)			
Moderator: Charles Jahren			
Time	Paper ID	Title	Authors
4:15	612	Automatic Relationship Classification To Support Semi-Automatic Ifc Extension	Jiansong Zhang, Nora El-Gohary
4:30	581	Building Energy Monitoring Realization: Context-Aware Event Detection Algorithms For Non-Intrusive Electricity Disaggregation	Farrokh Jazizadeh Karimi
4:45	530	Characterizing Construction Equipment Activities In Long Video Sequences Of Earthmoving Operations Via Kinematic Features	Ruxiao Bao, Mohammad Amin Sadeghi, Mani Golparvar-Fard
5:00	529	Developing Predictive Models Of Superstructure Ratings For Steel And Prestressed Concrete Bridges	Cristian Contreras-Nieto, Phil Lewis, Yongwei Shan
5:15	509	Electric Load Prediction Baseline For Airport Buildings: A Case Study	Minkyung Kang, Mario Berges, Burcu Akinci
5:30	539	Enhanced Appearance-Based Material Classification For Monitoring Of Operation-Level Construction Progress Through Removal Of Occlusions	Kevin Han, Banu Muthukumar, Mani Golparvar-Fard

May 31, 2016- 4:15pm -5:45 pm

Track: CII Research/Construction Materials, Means and Methods (Room 201-B)			
Moderator: Aaron Opdyke			
Time	Paper ID	Title	Authors
CII Research			
4:15	178	Prioritizing Engineering/Design Deliverables For Quality Defect Analysis	James O'Connor, Jeyoung Woo
4:30	278	Supplier Selection In Epc Projects: An Overview Of The Process And Its Main Activities	Thais Alves, Kioomars Ravaghi, Kim Needy
4:45	253	Team Building Moderators Of Engineering And Construction Industry Virtual Team Performance	Neda Mohammadi, John Taylor, Amy Javernick-Will
Construction Materials, Means and Methods			
5:00	59	Improved Reflection Crack Attenuation In Asphalt Pavement Overlays	Scott Shuler
5:15	457	Can Steel Slag Be Used As An Aggregate In Concrete And How?	George Wang
5:30	152	Economic Impact Of Recycled Concrete Aggregate: A Case Study Of Ethiopian Construction Industry	Mitiku Yehualaw, Asregedew Woldeesenbet

May 31, 2016- 4:15pm -5:45 pm

Track: Safety and Risk Management (Room 202-A)			
Moderator: Ali Touran			
Time	Paper ID	Title	Authors
4:15	161	Challenges And Opportunities Of Understanding Construction Worker'S Physical Demands Through Field Energy Expenditure Measurement Using A Wearable Activity Tracker	Sungjoo Hwang, Joonoh Seo, Juhyeong Ryu, Sanghyun Lee
4:30	21	Challenges With Managing Risk When Using The Observational Method Of Construction With Design-Bid-Build Delivery	Clifton Farnsworth
4:45	465	Comprehensive Risk Assessment Framework And Model Development For Energy Performance Contracting Retrofits In Correctional Facilities	George Berghorn, M.G. Matt Syal
5:00	91	Critical Factors That Impact Construction Worker'S Hazard Recognition Performance	Mostafa Namian, Carlos Zuluaga Santa, Alex Albert
5:15	574	Defining Mitigation Strategies For Recurring Epc Contract Risks	Benyamin Sadeghi, Mohammad Mehdi Mortaheb, Hamed Kashani
5:30	93	Degrees Of Connectivity Impact On Construction Worker Safety	John Gambatese, Kasim Alomari

May 31, 2016- 4:15pm -5:45 pm

Track: Quantitative Methods, BIM and Simulation (Room 202-B)			
Moderator: Reza Akhavian			
Time	Paper ID	Title	Authors
4:15	312	Detection Of Walls, Floors And Ceilings In Point Cloud Data	Ioannis Anagnostopoulos, Viorica Patraucean, Ioannis Brilakis, Patricio Antonio Vela
4:30	445	Building Information Modeling For Precast Construction: A Review Of Research And Practice	Madhumitha Senthilvel, Koshy Varghese, Ramesh Babu N
4:45	308	Case Study For Evaluating A Healthcare Facility Layout Design With Continuing Project Lifecycle Applications	Timothy McClure, Phillip Dunston
5:00	355	Challenges And Lessons Learned In Renovation Of Historical Landmarks: A Study On An Iconic Cathedral	Naveen D'Souza Lazar, Semiha Ergan
5:15	27	Communication By Interaction: A Multiplayer Virtual Reality Environment For Building Walkthrough	Jing Du, Yangming Shi, Chao Mei, John Quarles, Wei Yan
5:30	279	Design And Data Modelling Of Fibre Optic Systems To Monitor Reinforced Concrete Structural Elements	Juan Manuel Davila Delgado, Nicky De Battista, Ioannis Brilakis, Campbell Middleton

May 31, 2016- 4:15pm -5:45 pm

Track: Environmentally Sustainable Design and Construction (Room 202-C)			
Moderator: Jessica Kaminsky			
Time	Paper ID	Title	Authors
4:15	101	An Investment Allocation Approach For Building Energy Retrofits	Amirhosein Jafari, Vanessa Valentin
4:30	196	Towards A Holistic Perspective On Environmentally Sustainable Behavior: A Method For Linking Travel Attitudes With Electricity Consumption Data	Heta Kosonen, Amy Kim
4:45	102	Assessment Of Social Indicators In Energy Housing Retrofits	Amirhosein Jafari, Vanessa Valentin, Susan Bogus
5:00	426	Adoption Of Pre-Fabrication In Construction To Achieve Sustainability Goals: An Empirical Study	Suchismita Bhattacharjee, Pardis Pishdad-Bozorgi, Ram Ganapathy
5:15	472	Characterization Of Recycled Asphalt Shingles	Marwa Hassan, Aaron Lodge, Louay Mohammad, William King
5:30	51	Completing The Missing Puzzle Piece Of Building Design Process: Modeling And Identifying Occupants' Satisfaction Level In Commercial Buildings	Somayah Asadi, Ehsan Mostavi

May 31, 2016- 4:15pm -5:45 pm

Track: Infrastructure and Disaster Management (Room 203)			
Moderator: Didier Valdes			
Time	Paper ID	Title	Authors
4:15	452	A Comparison Of Two Quantitative Frameworks For Measuring The Resilience Of Ground Transportation Systems	Maria Nieves-Melendez, Jesus De La Garza
4:30	463	A Multi-Objective Decision Making Approach For Sustainable Maintenance Of Highways	Omidreza Shoghli, Jesus De La Garza
4:45	69	A Comparison Of Meta-Heuristic Algorithms In Multi-Objective Highway Maintenance And Time-Cost Tradeoff Problems	Yasaman Shahtaheri, Jesus De La Garza
5:00	310	Analyzing The Risk Criticality Of Infrastructure System On The Community	Citra Ongkowijoyo, Hemanta Doloi
5:15	216	Assessment Of Sea-Level Rise Adaptation In Coastal Infrastructure Systems: Robust Decision-Making Under Uncertainty	Mostafa Batouli, Ali Mostafavi
5:30	217	Assessment Of Stakeholders' Management Practice In Infrastructure Projects – An Indian Case Project	Hemanta Doloi, Santhosh Loganathan, K N Satyanarayana, Ashwin Mahalingam

May 31, 2016- 4:15pm -5:45 pm

Track: Planning and Control (Room 204)			
Moderator: Ryan Qi Wang			
Time	Paper ID	Title	Authors
4:15	505	Evaluation Of Proposed Highway Routes Based On Existing Utilities: A Cost Estimate Framework	Saad Aljadhai, Dulcy Abraham
4:30	561	Identifying The Optimal Execution Plan For Slums Infrastructure Upgrading Projects	Mahmoud Bahi, Omar El-Anwar, Mohamed Marzouk
4:45	76	Lean Approach To Production Planning For Large Solar Photovoltaic Installations	Yishu Wang, David Riley
5:00	496	Multi-Objective Optimization Algorithm For Sewer Network Rehabilitation Using Life Cycle Cost Analysis And Semi Markov Model	Ahmad Altarabsheh, Amr Kandil, Mario Ventresca
5:15	132	Planning And Cost Control Of Air Quality Control Systems For Clean Coal Power Generation	Gregory Fitch, Ibrahim Odeh, Kevin Peterson
5:30	117	Project Delivery Method Selection Analysis Of User Perceptions For Transportation Projects	Evan Bingham, Mounir El Asmar, G. Edward Gibson Jr.



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June 1, 2016- 10:45 am- 12:15 pm

Track : Contracting and Legal Issues (Room 201-A)			
Moderator: Mike Garvin			
Time	Paper ID	Title	Authors
10:45	136	A Cost Investigation And Customer Satisfaction Survey Of Culvert Cleaning And Sweeping Works In Nevada	Kishor Shrestha, Pramen Shrestha
11:00	83	Assessment Of Trust'S Impact On Bidding And Selection Processes In The Construction Industry	Tarek Mahfouz, Ghada Moustafa Gad, James Jones, Jennifer Warrner, Sherif Attallah
11:15	486	Can Contractors Predict Change Orders? Investigating A Historical Allegation	Ali Shafaat, Tarek Mahfouz, Amr Kandil, Majed Alinizzi
11:30	96	Impacts Of Levels Of Trust On Dispute Occurrence In Highway Projects	Sogand Hasanazadeh, Ghada Moustafa Gad, Samaneh Nasrollahi, Behzad Esmaeili, Douglas Gransberg
11:45	296	Integrating Project Teams With The Use Of Partnering	Christofer Harper, Christopher Waldrop
12:00	504	Legal And Contractual Challenges Of Bim - Designer'S Perspective	Arjun Pandey, Farzad Shahbodaghlou

June 1, 2016- 10:45 am- 12:15 pm

Track: Construction Materials, Means and Methods (Room 201-B)			
Moderator: George Wang			
Time	Paper ID	Title	Authors
10:45	36	Approaches And Associated Costs For Removal Of Abandoned Buildings	Shershah Zahir, M.G. Matt Syal, Rex Lamore, George Berghorn
11:00	474	Mechanistic, Environmental, And Economic Analysis Of Wma Technologies In La	Louay Mohammad, Marwa Hassan, Bhanu Vallabhu, Sharear Kabir
11:15	376	Modeling And Optimizing The Efficiency-Variety Tradeoff Of Customized Prefabricated Panelized Exterior Walls	Hisham Said, Tejaswini Chalasani, Stephanie Logan
11:30	151	Nanosilica Particles In Concrete: Optimization For Compressive Strength, Permeability And Cost-Benefit Relationship	Luis Gonzalez, Omar Molina-Bas, Genock Portela
11:45	71	Studies On The Mechanical Properties And Durability In Aerial Lime Mortars Using Mineral Admixtures	Nicole Lopez, Omar Molina-Bas
12:00	219	Study Of The Potential Of Ethiopian Rice Husk As A Partial Replacement Of Cement	Solomon Belay, Asregedew Woldesenbet

June 1, 2016- 10:45 am- 12:15 pm

Track: Safety and Risk Management (Room 202-A)			
Moderator: Behzad Esmaeili			
Time	Paper ID	Title	Authors
10:45	535	Determining The Role Of Attentional Control Among Construction Workers In Improving Safety Performance	Atefeh Mohammadpour, Somayeh Asadi, Ebrahim Karan
11:00	212	Developing A Framework For Approaching Construction Safety From An Ethical Perspective	Erika Jaramillo, Didier Valdes, Antonio Gonzalez-Quevedo, Francisco Maldonado-Fortunet
11:15	88	Distracted Driver Speeds Around Work Zones	Nicholas Tymvios, Scott Oosthuysen
11:30	61	Do Designers And Builders Share Similar Understanding Of Occupational Safety And Health Risks?	Dong Zhao, Andrew Mccoy, Brian Kleiner
11:45	52	Emotional States And Their Impact On Hazard Identification Skills	Siddharth Bhandari, Matthew Hallowell, Leaf Boven, June Gruber, Keith Welker
12:00	179	Fuzzy Weighted Interpretive Structural Modeling: A New Method For Risks Path Identification Of The Infrastructure Projects	Hannaneh Etemadinea, Mehdi Tavakolan

June 1, 2016- 10:45 am- 12:15 pm

Track: Quantitative Methods, BIM and Simulation (Room 202-B)			
Moderator: Ioannis Brilakis			
Time	Paper ID	Title	Authors
10:45	214	Geological Risk Assessment And Its Impact On Tunnel Construction	Juan Bravo-Paez, Carlos Arboleda
11:00	572	Developing A Smart Controller Model Using Gps Coordinate	Hosein Taghaddos, Arash Eslami
11:15	208	Developing A Taxonomy Of Construction Model Uses	Li Jiang, Miaomiao Niu, Robert Leicht, John Messner
11:30	235	Development Of An Immersive Game For Human Behavior Data Collection	Jun Zhang, Raymond Issa, Rui Liu
11:45	245	Dynamic Meta-Network Modeling For Integrated Project Performance Assessment Under Uncertainty	Jin Zhu, Ali Mostafavi
12:00	357	Estimation Of The Escalation Factor In The Construction Projects Using Value At Risk	Alireza Joukar, Isabelina Nahmens

June 1, 2016- 10:45 am- 12:15 pm

Track: Environmentally Sustainable Design and Construction (Room 202-C)			
Moderator: Eugenio Pellicer			
Time	Paper ID	Title	Authors
10:45	225	Defining Lighting Settings To Accommodate End-User Preferences While Reducing Energy Consumption In Buildings	Arsalan Heydarian, Evangelos Pantazis, David Gerber, Burcin Becerik-Gerber
11:00	6	Factors Influencing Energy Consumption Of Residential Buildings: A Review	Hamed Nabizadeh Rafsanjani
11:15	124	Framework For An Optimization Model For Light Design In Retail Stores	Mohamed Abdel-Raheem, Abdul Rizwan Mohammed, Mohamed Abdel-Raheem, Li Jinazi
11:30	291	Improving Analysis Of Historic Wooden Structures Through Non-Destructive Testing Of Connections	Paul Crovella, George Kyanka
11:45	116	Improving Thermal Efficiency And Environmental Sustainability Of Building Insulation	Celine Manoosingh
12:00	142	Introduction Of Mechanistic-Empirical Pavement Design Into Pavement Carbon Footprint Analysis	Xiaoyu Liu, Qingbin Cui

June 1, 2016- 10:45 am- 12:15 pm

Track: Infrastructure and Disaster Management (Room 203)			
Moderator: David Jeong			
Time	Paper ID	Title	Authors
10:45	344	Characterizing Post-Disaster Shelter Design And Material Selection: Lessons From Typhoon Yolanda In The Philippines	Aaron Opdyke, Amy Javernick-Will, Matthew Koschmann, Hannah Moench
11:00	210	Onsite Wastewater Treatment Management Systems	Leigh Allison, Jessica Kaminsky
11:15	331	Diffusion And Simulation Of Human Mobility Using Online Networks Data To Examine Mobility Constraints	Qi Wang, John Taylor
11:30	403	Dynamic Modeling Of Coupled Human And Water Sector Infrastructure Interdependencies In Shrinking Cities	Kasey Faust, Dulcy Abraham
11:45	221	Estimating Infrastructure Condition Based On Inferential Geospatial Modeling	Su Zhang, Susan Bogus, Christopher Lippitt
12:00	158	Evaluation Of New York State County Plans For Disaster Resiliency	Elham Azimi, Samaneh Gholitabar, Fletcher. H. Griffis

June 1, 2016- 10:45 am- 12:15 pm

Track: Planning and Control (Room 204)			
Moderator: Jesús de la Garza			
Time	Paper ID	Title	Authors
10:45	415	Project Time Management And Schedule Performance In Mexican Construction Projects	Romel Solis-Carcano, Gilberto Corona-Suarez
11:00	209	Relationship Between On-Site Planning Effort And Work Plan Reliability	S. Alireza Abbasian-Hosseini, Gregory Howell, Min Liu
11:15	601	Temporary Haul Road Layout Design Optimization Based On A Rough Grading Project	Chaojue Yi, Ming Lu
11:30	313	A Framework For Investigating The Impact Of Planners' Risk Attitude On Optimal Project Completion Outcomes	Reza Sheykhi, Wallied Orabi
11:45	38	Understanding The Construction Winner'S Curse Using Game Theory	Islam El-Adaway, Muaz Ahmed, Kalyn Coatney, Mohamed Eid
12:00	156	Use Of Warranty Tracking Program To Identify And Resolve Performance Risks	Dhaval Gajjar, Kenneth Sullivan, Dean Kashiwagi, Brian Lines



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Track : Contracting and Legal Issues (Room 201-A)			
Moderator: Ghada Moustafa Gad			
Time	Paper ID	Title	Authors
2:15	75	Legal Aspects Connected To The Use Of Bim In The Danish Building Sector	Lene Faber Ussing, Soren Wandahl, Kjeld Svidt
2:30	575	Management Of Force Majeure Risks In Canadian Ppp Transportation Projects	Ahmed Abdel Aziz, Tai-Ling Shen
2:45	576	Risk Allocation And Management Practices In Highway Ppp Contracts: Pilot Study Of Virginia	Duc Nguyen, Mike Garvin
3:00	619	Schedule Performance Of Construction Manager At Risk (Cmar) Delivery On Pipeline Engineering And Construction Projects	Tober Francom, Mounir El Asmar, Samuel Ariaratnam
3:15	168	Unmanned Aerial Vehicles In Construction: An Overview Of Current And Proposed Rules	Michele Herrmann
3:30			

June 1, 2016- 2:15 pm- 3:45 pm

Track: Organizational Issues, Productivity and Workforce Issues (Room 201-B)			
Moderator: Jose L. Perdomo			
Time	Paper ID	Title	Authors
2:15	297	3D Matching Of Resource Vision Tracking Trajectories	Eirini Konstantinou, Ioannis Brilakis
2:30	510	A Case Study Of The Productivity Improvement By Electrical Prefabrication	Hossein Khaleghian, Yongwei Shan, Phil Lewis
2:45	374	A Case Study On Estimating Optimal Labor Productivity	Krishna Kisi, Eddy Rojas, E. Terence Foster, Nirajan Mani
3:00	45	A Framework To Form Balanced Project Portfolios	Reza Masoumi, Ali Touran
3:15	478	A Fuzzy Aggregation Method For Measuring Construction Crew Motivation	Aminah Robinson Fayek, Mohammad Raoufi, Ian Gellatly
3:30	228	Absenteeism And Turnover Of Migrant Construction Workers In Indian Projects – A Survey Based Study	Santhosh Loganathan, K N Satyanarayana

June 1, 2016- 2:15 pm- 3:45 pm

Track: Safety and Risk Management (Room 202-A)			
Moderator: Matt Syal			
Time	Paper ID	Title	Authors
2:15	79	How Social Norms Influence Construction Workers' Safety Behavior : A Social Identity Perspective	Byungjoo Choi, Sanghyun Lee
2:30	72	Impact Of Training Methods On Hazard Recognition And Risk Perception In Construction.	Carlos Zuluaga Santa, Mostafa Namian, Alex Albert
2:45	115	Impacts Of Construction Work Zone Equipment And Operations On Vehicle Speeds	John Gambatese, Fan Zhang
3:00	81	Leading Indicators In The Construction Industry: From Measurement To Management	Raymond Issa, Andrew Wehle
3:15	608	Measuring Construction Workers' Real-Time Situation Awareness Using Mobile Eye-Tracking	Sogand Hasanzadeh, Behzad Esmaeili, Michael Dodd
3:30	193	Measuring Occupational Fatigue: A Comprehensive Review And Comparison Of Subjective And Objective Methods	Ulises Techera, Matthew Hallowell, Eric Marks, Nathan Stambaugh

June 1, 2016- 2:15 pm- 3:45 pm

Track: Quantitative Methods, BIM and Simulation (Room 202-B)			
Moderator: Walid Thabet			
Time	Paper ID	Title	Authors
2:15	527	Evaluating The Impact Of Reflecting The As-Is Building Condition In Bim-Based Energy Modeling Process On Building Energy Simulation	Jongwook Jeon, Youngjib Ham
2:30	617	Evaluation And Comparison Of Different Virtual Reality Environments Towards Supporting Tasks Done On A Virtual Construction Site	Varun Kasireddy, Zhengbo Zou, Burcu Akinci, Justin Rosenberry
2:45	491	Exploring Horizontal And Vertical Illuminance Daylighting Uniformity Metrics	Zack Rogers, Caroline Clevenger, Brik Zivkovich, Moatassem Abdallah
3:00	578	Exploring Student Commute Behavior And Identifying Opportunities To Minimize Commute Ghg And Air Pollution Emissions: A Case Study	Caroline Clevenger, Moatassem Abdallah, Aly Tawfik, Beranea Adame, Duygu Akalp, Mehmet Ozbek
3:15	56	Facility Sustainment Management System Automated Population From Building Information Models	Rui Liu, Garry Zettersten
3:30	336	Platform For Real Time Operational Overview Of Construction Operations	Joseph Louis, Phillip Dunston

June 1, 2016- 2:15 pm- 3:45 pm

Track: Environmentally Sustainable Design and Construction (Room 202-C)			
Moderator: Marwa Hassan			
Time	Paper ID	Title	Authors
2:15	186	Challenges And Opportunities In Microgrid And Solar Photovoltaic System Construction	David Riley, Atefeh Mohammadpour, Kevin Wright
2:30	259	Meta-Analysis Of Eco-Feedback-Induced Occupant Energy Efficiency Benchmarked With Standard Building Energy Rating Systems	Ardalan Khosrowpour, Tugce Duzener, John Taylor
2:45	531	Model-Driven Management Of Construction Carbon Footprint: A Case Study	Monica Chhatwani, Mani Golparvar-Fard
3:00	558	On The Performance Of A Net Zero Energy House: A Case Study Of The Gridstar House In Navy Yard, Philadelphia	Yumna Kurdi, David Riley, Shideh Shams Amiri, Somayah Asadi
3:15	353	Perceptions Of Historic Projects In The Construction Industry	Rebecca Warr, Clifton Farnsworth
3:30	170	Quantifying Plug Load Energy Use In A Leed Gold Building - Lessons Learned In The Installation Phase	Amy Kim, Heta Kosonen

June 1, 2016- 2:15 pm- 3:45 pm

Track: Infrastructure and Disaster Management (Room 203)			
Moderator: Ali Mostafavi			
Time	Paper ID	Title	Authors
2:15	317	Increasing Resilience By Participatory Planning Approach	Muzibur Rahman, Somik Ghosh
2:30	207	Information Deficits And Post-Disaster Recovery	Erin Arneson, Derya Deniz, Amy Javernick-Will, Abbie Liel, Shideh Dashti
2:45	194	Multi-Agent Framework For Complex Adaptive Modeling Of Interdependent Critical Infrastructure Systems	Jose Pereyra, Ali Mostafavi, Xudong He
3:00	32	Resilient, Sustainable And Green Infrastructure Concepts - A Literature Review And Proposed Preliminary Framework For A Comprehensive Infrastructure Evaluation System (Cies)	Mohammed Hashem M. Mehany
3:15	37	Developing A Post Disaster Insurance Profile Using Evolutionary Game Theory	Islam El-Adaway, Kalyn Coatney, Mohamed Eid
3:30	192	Optimizing Highway Rehabilitation Decisions To Minimize Fuel Consumption In Transportation Networks	Charinee Limsawasd, Wallied Orabi, Nathee Athigakunagorn

June 1, 2016- 2:15 pm- 3:45 pm

Track: Architecture/Engineering/Construction Education (Room 204)			
Moderator: Dong Zhao			
Time	Paper ID	Title	Authors
2:15	242	How To Reduce The Negative Impacts Of Knowledge Heterogeneity In Engineering Project Team? Exploring The Role Of Team Communication	Li Xiaonan, Lianying Zhang
2:30	283	Collaborative Learning Via Vertical Integration Of Multiple Classes	Seokyon Hwang, Mahdi Safa
2:45	13	Construction Industry Simulation (Coins): Use As A Construction Accounting Training Tool	Thomas Korman
3:00	325	Design Change Time Ripple Effect Analysis Using A Bim-Based Quantification Model	Valeh Moayeri, Osama Moselhi, Zhenhua Zhu
3:15	31	Designing A Graduate Level Construction Human Resource Management Course Using Construction Industry Professionals	Justin Weidman
3:30	598	Framework Development To Introduce Bim Into Civil Engineering Undergraduate Curriculum At University Of Puerto Rico, Mayagüez Campus	Kevin Rodriguez, Juan Davila



CONSTRUCTION²⁰¹⁶ RESEARCH CONGRESS

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June 1, 2016- 4:00 pm- 5:30 pm

Track : Contracting and Legal Issues/Cost and Schedule (Room 201-A)			
Moderator: Hisham Said			
Time	Paper ID	Title	Authors
Contracting and Legal Issues			
4:00	620	Study Of The Change Orders In Design-Build Projects In The Schools Of The Xxi Century	David Ramos, Omar Molina-Bas, Antonio Gonzalez-Quevedo
Cost and Schedule			
4:15	120	A Game Theoretic Model For Subcontractors Partnership In Construction Win-Win Game	Reihaneh Samsami, Mehdi Tavakolan
4:30	17	A Stochastic Simulation Approach For Integration Of Risk And Uncertainty Into Mega-Project Cost And Schedule Estimates	Maryam Shahtaheri, Carl Haas, Tabassom Salimi
4:45	204	An Ahp-Based Selection Model For Ranking Potential Strategies For Managing Construction'S Cost Volatilities	Alireza Joukar, Isabelina Nahmens, Craig Harvey
5:00	497	Assessment Of Recycled Asphalt Paving Unit Cost Risk: A Case Analysis	Matthew Stone, David Herndon, Ed Back, Serji Amirkhanian
5:15	508	Cost Optimization Of Repetitive Projects With Varying Production Rates Using Max-Min Ant System	Hamid Reza Zolfaghar Dolabi, Abbas Afshar

June 1, 2016- 4:00 pm- 5:30 pm

Track: Organizational Issues, Productivity and Workforce Issues (Room 201-B)			
Moderator: Timo Hartmann			
Time	Paper ID	Title	Authors
4:00	546	An Approach To Assessment Of Fall Risk For Building Construction	Long Nguyen, Daniel Tran
4:15	1	An Investigation Into Perceived Quality Of Communications In Dispersed Construction Project Teams	Reza Hosseini, Mojtaba Maghrebi, Nicholas Chileshe, S. Travis Waller
4:30	512	Quality And Learning: A Case From The Construction Industry In The Mena Region	Daoud Kiomjian, F. Jordan Srour, Issam Srour
4:45	35	Analyzing Use And Policies For Mobile Information Technology Devices Within State Departments Of Transportation	Xi Wang, Roy Sturgill, Gabriel Dadi
5:00	361	Are Building Construction Project Delivery Systems Complicated Or Complex?	Chao Xiao, José Fernandez-Solis
5:15	453	Bim-Based Management Of Building Operations	Saratu Terreno, Chimay Anumba, Craig Dubler

June 1, 2016- 4:00 pm- 5:30 pm

Track: Safety and Risk Management (Room 202-A)			
Moderator: Yongwei Shan			
Time	Paper ID	Title	Authors
4:00	176	Near Miss Information Visualization Tool For Bim	Xu Shen, Eric Marks
4:15	302	Overview And Analysis Of Safety Climate Studies In The Construction Industry	Miaomiao Niu, Robert Leicht, Steve Rowlinson
4:30	213	Perceptions Of The Influence Of Personal Demographic Factors On Safety Performance Of Field Employees	Ali Moghaddam Vahed, John Gambatese, Matthew Hendricks
4:45	177	Physiological Data Collection And Monitoring Of Construction Equipment Operators	Ibukun Awolusi, Eric Marks, Matthew Hallowell
5:00	167	Safety And Age: A Longitudinal Study Of Ontario Construction Workers	Yuting Chen, Brenda Mccabe, Douglas Hyatt
5:15	58	Worker Distractions Impacts On Safety And Work Quality: An Energy Component	John Gambatese, Chukwuma Nnaji

June 1, 2016- 4:00 pm- 5:30 pm

Track: Quantitative Methods, BIM and Simulation (Room 202-B)			
Moderator: Jose L. Perdomo			
Time	Paper ID	Title	Authors
4:00	224	Improvement Of Facility Condition Assessment Process Using Bim Data	Karam Kim, Jungho Yu
4:15	220	Interoperable Coordination Method For Sharing Communication Information Using Bcf(Bim Collaboration Format)	Jin Gang Lee, Hyun-Soo Lee, Moonseo Park, Woosang Kim
4:30	287	Modeling And Simulation Of The Evacuation Plan Of A Football Stadium	Haiyan Xie, Nirmal Weerasekara
4:45	590	Object Value Aggregation For Modeling Building System Integration And Value	Lu Zhang, Nora El-Gohary
5:00	199	Optimal Risk Attitude For Construction Contractors In Competitive Bidding Environments	Sadegh Asgari, Amr Kandil, Ibrahim Odeh
5:15			

June 1, 2016- 4:00 pm- 5:30 pm

Track: Environmentally Sustainable Design and Construction (Room 202-C)			
Moderator: Francisco Maldonado			
Time	Paper ID	Title	Authors
4:00	274	Selection Of Design And Construction Parameters For Energy Efficient Housing Using System Dynamics	Silvia Tijo-Lopez, Daniel Castro-Lacouture
4:15	103	Sensitivity Analysis Of Factors Affecting Decision-Making For Housing Energy Retrofit: A Case Study	Amirhosein Jafari, Vanessa Valentin, Mark Russell
4:30	292	Visualizing And Analyzing Urban Energy Consumption: Critical Review And Case Study	Negar Salimzadeh, Seyed Amirhosain Sharif, Amin Hammad
4:45	360	The Built Environment And Bmi: How Leed And Land Use Mix Relate To Public Health	Scott Kelting, Cal Poly, San Luis Obispo Geir Phillips
5:00	105	The Michael Horman Symposium: Developing A Network Of Researchers And Mentorship For Sustainability Topics	Rodolfo Valdes-Vasquez, Denise Simmons, Dong Zhao, Kristen Parrish
5:15	613	Uncovering Key Criteria To Assess Sustainability Rating Systems For The Built Environment	Dean Papajohn, Mounir El Asmar, Chris Brinker

June 1, 2016- 4:00 pm- 5:30 pm

Track: Infrastructure and Disaster Management (Room 203)			
Moderator: Omidreza Shoghli			
Time	Paper ID	Title	Authors
4:00	354	Predicting Water Main Breaks Frequency In Water Distribution System	Hamed Zamenian, Dulcy Abraham, Fred Mannering
4:15	250	Multi-Tiered Database Schema For Integrated Municipal Asset Management	Ibrahim Bakry, Hany Elsawah, Osama Moselhi
4:30	254	Risk Analysis Of Bridges To Prioritize Post-Storm Scour Mitigation Plans	Samaneh Gholitabar, Elham Azimi, Fletcher. H. Griffis
4:45	318	Risk Asset Management Of Power Grids	Niloufar Youssefi, Osama Moselhi
5:00	547	State Transportation Agency Use Of Community Outreach Tools On Accelerated Highway Construction Projects	Farzad Minooei, Nathaniel Sobin, Paul Goodrum, Keith Molenaar
5:15	262	Survey On The Practice Hurdles In Collecting, Managing, And Sharing Transportation Infrastructure Asset Data	Chenxi Yuan, Timothy McClure, Phillip Dunston, Hubo Cai

June 1, 2016- 4:00 pm- 5:30 pm

Track: Architecture/Engineering/Construction Education (Room 204)			
Moderator: Min Liu			
Time	Paper ID	Title	Authors
4:00	501	Women In Construction Workshop: Outreach To Female Students From Developing Countries	Elshan Asadi, Reza Akhavian, Amir Behzadan
4:15	489	Early Development Of An Interdisciplinary Construction Engineering Management Program	Caroline Clevenger, Heidi Brothers, Moatassem Abdallah, Kenneth Wolf
4:30	479	Framework For Assessing The Impact Of Construction Research And Development On The Construction Industry And Academia	Ahmed Daoud, Aminah Robinson Fayek
4:45	112	Advancing Building Energy Efficiency Through Engaged Scholarship	Mahsa Safari, David Riley, Somayeh Asadi, Parhum Delgoshaei, Lisa Shulock
5:00	378	Introducing Civil Engineering Students To Ethical Infrastructure Development: Toll Road Design Exercise	Hisham Said, Vy Jessica Ngo, Katerina Bezrukova
5:15	173	Teaching Collaborative Skills: The Results Of An Interactive Symposium	Michele Herrmann, Hans Herrmann, Emily Mcglohn



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June 2, 2016- 10:15 am-11:45 am

Track: Cost and Schedule (Room 201-A)			
Moderator: Pramen Shresthra			
Time	Paper ID	Title	Authors
10:15	350	Cost Reduction In Dam Infrastructure Using Arced Labyrinth Spillways	Jamie Lopez-Soto, Johannes Wibowo, Omar Molina-Bas
10:30	534	Deadline Constraint Satisfaction In Line-Of-Balance Scheduling Method For Resource-Constrained Projects With Non-Serial Activities	Hamid Reza Zolfaghar Dolabi, Abbas Afshar
10:45	424	Impact Of Correlation On Risk-Cost Analysis For Construction Highway Projects	Daniel Tran, Sai Pavan Kumar Bypaneni
11:00	165	Impact Of Incentive/Disincentive Levels On Time/Cost Trade-Off In Pavement Rehabilitation Projects	Mohamed Ibrahim, Wallied Orabi
11:15	184	Integrating Bim And Project Schedule Information Using The Semantic Web Technology	Mehrdad Niknam, Saeed Karshenas
11:30			

June 2, 2016- 10:15 am-11:45 am

Track: Organizational Issues, Productivity and Workforce Issues (Room 201-B)			
Moderator: Baabak Ashuri			
Time	Paper ID	Title	Authors
10:15	418	Citizenship Behavior And Performance In A Project Management Context	Sijia Guo, Xueqing Wang, Muxue Li
10:30	78	Directive Versus Empowering Leadership In Temporary Project Teams: An Agent Based Modeling Approach	Yikun Zhou, Jing Du, Qian Shi, John Horlen
10:45	482	Exploring The Factors For Collaborative Relationship In Ipd Projects	Lianying Zhang, Qinzhen Qian
11:00	555	Job Assignment To Construction Workers: Accounting For Brain Resource Requirements Of Activities	Alireza Ahmadian Fard Fini, Ali Akbar Nezhad, Taha Rashidi, S. Travis Waller
11:15	267	Key Information Sharing Behaviors For Improved Performance In Ipd Project Teams	Angelo Joseph Garcia, Brian Manata, Sinem Korkmaz, Venon Miller
11:30	503	Serious Gaming In Construction Management Research And Education	Timo Hartmann

June 2, 2016- 10:15 am-11:45 am

Track: Safety and Risk Management (Room 202-A)			
Moderator: Deborah Dickerson			
Time	Paper ID	Title	Authors
10:15	519	The Impact Of The Legalization Of Recreational Marijuana On Construction Safety	Mohammad Sadra Fardhosseini, Behzad Esmaeili
10:30	518	The Relationship Between Construction Workers' Risk Perception And Eye Movement In Hazard Identification	Mahmoud Habibnezhad, Mohammad Sadra Fardhosseini, Behzad Esmaeili, Michael Dodd
10:45	44	Time-Cuboid Model With Reduced False Alarms For Construction Safety	Jun Wang, Saiedeh Razavi
11:00	24	Safety Challenges In The Us Construction Industry: The Hispanic Workforce Perspective	Ahmed Al-Bayati, Osama Abudayyeh
11:15			
11:30			

June 2, 2016- 10:15 am-11:45 am

Track: Quantitative Methods, BIM and Simulation (Room 202-B)			
Moderator: Jason Lucas			
Time	Paper ID	Title	Authors
10:15	440	Optimizing The Selection And Layout Of Table Forms With Different Dimensions Using Bim And Integer Programming	Sina Mohammadi, Mehdi Tavakolan, Banafsheh Zahraie, Omid Pourmadadkar
10:30	480	Fuzzy System Dynamics For Modeling Construction Risk Management	Nasir Siraj, Aminah Robinson Fayek
10:45	183	Simulation Analysis Of Construction Safety In Tunnel Construction	Limao Zhang, Simaan Abourizk
11:00	494	Random Generation Of Complex Data Structures For Simulation Of Construction Operations	Mubarak Al-Alawi, Ahmed Bouferguene, Yasser Mohamed
11:15	464	Reconsidering An Appropriate Probability Distribution Function For Construction Simulation	Richard Thompson, Gunnar Lucko, Yi Su
11:30	95	Role Of Bim And 3D Laser Scanning On Jobsites From The Perspective Of Construction Project Management Personnel	John Gambatese, Kasim Alomari, Michael Olsen

June 2, 2016- 10:15 am-11:45 am

Track: Environmentally Sustainable Design and Construction/Global Construction Issues (Room 202-C)			
Moderator: Edwin Gonzalez			
Time	Paper ID	Title	Authors
Environmentally Sustainable Design and Construction			
10:15	514	An Lcm Framework To Couple Spatially Distributed Energy Simulation And Occupancy Models For Optimizing Building Energy Consumption	Albert Thomas, Carol Menassa, Vineet Kamat
10:30	172	Value And Trust Performance Metrics In Home Energy Audits	Fuju Wu, David Riley, Robert Leicht, Gul Kremer, Somayeh Asadi
10:45	584	Sustainability Indicators For Supporting Multi-Scale Sustainability Assessment And Prediction	Lufan Wang, Nora El-Gohary
Global Construction Issues			
11:00	444	A Data-Driven Approach To Country Classification In The International Construction Market	Kang-Wook Lee, Seung Heon Han, Chan Young Park
11:15	201	Risk Attitudes & Global Infrastructure Technology Choice	Jessica Kaminsky, Jeffrey Walters
11:30			

June 2, 2016- 10:15 am-11:45 am

Track: Infrastructure and Disaster Management (Room 203)			
Moderator: Vanessa Valentin			
Time	Paper ID	Title	Authors
10:15	39	Sustainable Infrastructure Development Through Integrating The Stakeholders Preferences And Host Community'S Environmental Vulnerability	Islam El-Adaway, Mohamed Eid
10:30	265	Understanding The Role Of Dynamic Risk Perception During Fire Evacuations Using Agent-Based Modeling	Minji Choi, Moonseo Park, Hyun-Soo Lee, Sungjoo Hwang, Kyle Anderson, Sanghyun Lee
10:45	284	Using Cadastral Surveys And Gis Data For Automated Multi-Criteria Assessment Of Vulnerability Of Residential Parcels To Wildfires	Elmira Kalhor, Vanessa Valentin
11:00	526	Using Data Analytics To Characterize Steel Bridge Deterioration	Yongwei Shan, Cristian Contreras-Nieto, Phil Lewis
11:15			
11:30			

June 2, 2016- 10:15 am-11:45 am

Track: Architecture/Engineering/Construction Education/ Construction Procurement and Financing (Room 204)			
Moderator: Rodolfo Valdes			
Time	Paper ID	Title	Authors
Architecture/Engineering/Construction Education			
10:15	563	The Future Of Construction Education: Partnering With Industry	Angela Guggemos, Mostafa Khattab
10:30	77	Facilitating Industrial Placement In Construction Engineering Curriculum	Soren Wandahl, Lene Faber Ussing
Construction Procurement and Financing			
10:45	566	An Integrated Entropy-Topsis-Dea Method To Assess Financial Strength Of Construction Companies	Farshid Baniassadi, Hamed Kashani, Seyyedeh Fatemeh Naseri
11:00	26	Making The Business Case For Alliance Contracting On Us Megaprojects	Douglas Gransberg, Eric Scheepbouwer, Carla Lopez Del Puerto
11:15	304	Measuring Owner Transaction Costs In Construction Contracting	M. Scott Stanford, Keith Molenaar
11:30	599	Current Practices Of Highway Construction Cost Index (Hcci) Calculation And Utilization	Joseph Shrestha, David Jeong, Douglas Gransberg



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June 2, 2016- 2:00 pm-3:30 pm

Track: Cost and Schedule (Room 201-A)			
Moderator: Carla Lopez del Puerto			
Time	Paper ID	Title	Authors
2:00	140	Optimization Of Project Schedule Crashing	Pramen Shrestha, Kabindra Shrestha
2:15	346	Parametric Cost Estimation Of Resurfacing Projects Using Ridge Regression And Generalized Feedforward Neural Network	Yuanxin Zhang, Edward Minchin
2:30	111	Rationalizing Project Schedule Using Realistic Baseline Worker Productivity	Keshav Kunal, Pawan Pandey, Uma Maheswari
2:45	329	Recommended Practices For The Cost Control Of Highway Project Development	Minsoo Baek, Kia Mostaan, Baabak Ashuri
3:00	154	Simulating Balanced Allocation Of Project Float To The Critical Path In Network Schedules	Gunnar Lucko, Richard Thompson, Yi Su
3:15	542	Use Of Hybrid Bidding Method For Costs And Risks Reductions In Highway Construction	Jose Fontan-Pagan, Sergio Gonzalez-Quevedo, Antonio Gonzalez-Quevedo

June 2, 2016- 2:00 pm-3:30 pm

Track: Organizational Issues, Productivity and Workforce Issues (Room 201-B)			
Moderator: Kasey Faust			
Time	Paper ID	Title	Authors
2:00	86	Analyzing The Barriers Influencing The Application Of Real Options In The Construction Industry	Mohammad Saied Andalib, Mehdi Tavakolan, Behrooz Gatmiri
2:15	586	Searching For Knowledge And Experts In Engineering And Construction Organizations	Cristina Poleacovschi, Amy Javernick-Will, Tony Tong
2:30	569	On The Evaluation Of The Main Drivers Of Motivation In Construction Industry	Kathryn Gonzales, Somayeh Asadi, Robert Leicht
2:45	89	The Influence Of Production System Design On The Task Demands Of Concrete Workers: A Case Study	Babak Memarian, Panagiotis Mitropoulos
3:00	544	Transfer Of Operator Training From Simulated To Real Hydraulic Excavators	Phillip Dunston, Joey So, Lynn Macrowski, Robert Proctor, Jonathan Goodney
3:15	342	Uncovering Market Entry Decision Factors For The Sheet Metal And Hvac Industry	Jera Sullivan, Mounir El Asmar, Kenneth Sullivan

June 2, 2016- 2:00 pm-3:30 pm

Track: Quantitative Methods, BIM and Simulation (Room 202-B)			
Moderator: Jinsung Cho			
Time	Paper ID	Title	Authors
2:00	123	Semantic And Geometric Labeling For Enhanced 3D Point Cloud Segmentation	Yeritza Perez-Perez, Mani Golparvar-Fard, Kaled El-Rayes
2:15	252	Bimap: Plan Drawings As Tangible Interfaces For Building Information Models	Chao-Chung Yang, Vineet Kamat, Carol Menassa
2:30	255	The Need For Representing Facility Information With Customized Lod For Specific Fm Tasks	Priscila Daher Russo Dias, Semiha Ergan
2:45			
3:00			
3:15			

June 2, 2016- 2:00 pm-3:30 pm

Track: Data Sensing and Analysis (Room 202-C)			
Moderator: Ricardo Lopez Rodriguez			
Time	Paper ID	Title	Authors
2:00	134	Evaluating The Impact Of Motion Sensing Errors On Ergonomic Analysis	Alireza Golabchi, Sanguk Han, Simaan Abourizk
2:15	524	Improving Situational Awareness Of The As-Is Building Conditions Through Multi-Modal Sensing And Analytics Using Thermal Camera-Equipped Smartphones	Youngjib Ham, Hyungchul Yoon, Billie Spencer
2:30	119	Point Cloud Data Cleaning And Refining For Built Infrastructure Modeling Applications	Abbas Rashidi, Ioannis Brilakis
2:45	303	Project Related Entities Tracking On Construction Sites By Particle Filtering	Xiaoning Ren, Zhenhua Zhu, Zhi Chen, Fei Dai
3:00	580	Semantic Modeling Of Bridge Deterioration Knowledge For Supporting Big Bridge Data Analytics	Kaijian Liu, Nora El-Gohary
3:15	490	Sensing Occupant Comfort Using Wearable Technologies	Moatassem Abdallah, Caroline Clevenger, Tam Vu, Anh Nguyen

June 2, 2016- 2:00 pm-3:30 pm

Track: Robotics and Automation (Room 203)			
Moderator: Masoud Gheisari			
Time	Paper ID	Title	Authors
2:00	410	Automated Visual Recognition Of Indoor Project-Related Objects: Challenges And Solutions	Hesam Hamledari, Brenda Mccabe
2:15	425	Development Of "Smart Laser Projector" For Guiding Tunnel Boring Construction	Sheng Mao, Ming Lu
2:30	100	Feasibility Assessment Of Unmanned Aerial Vehicles For Construction Management Applications	Raymond Issa, Nathan Blinn
2:45	564	Sustainable Design Automation For Simple And Repetitive Structures	Julian Kang, Manmeetsingh Sethi
3:00	272	Potential Factors Influencing The Performance Of Unmanned Aerial System (Uas) Integrated Safety Control For Construction Worksites	Sungjin Kim, Javier Irizarry, Dayana Bastos Costa
3:15	461	Sensor-Based Planning Tool For Tower Crane Anti-Collision Monitoring On Construction Sites	Jean-Pierre Sleiman, Emile Zankoul, Hiam Khoury, Farook Hamzeh

June 2, 2016- 2:00 pm-3:30 pm

Track: Construction Procurement and Financing (Room 204)			
Moderator: Keith Molenaar			
Time	Paper ID	Title	Authors
2:00	211	Design-Build Mega-Bridge Projects In New York And Best Practices In Procurement	Raymond Moran, Ibrahim Odeh
2:15	133	Economic Sustainability Of Dbo Water And Wastewater Projects In The U.S.: Three Case Studies	Gregory Fitch, Ibrahim Odeh, C. William Ibbs
2:30	8	General Contractors And Cost Segregation Studies	Ben Bigelow, Jeremy Robinson
2:45	538	Synthesis Of Innovation Research In Public-Private Partnership Projects	Edwin Gonzalez, Mike Garvin
3:00	49	Writing More Competitive Proposals: Content Analysis Of Selected (And Unselected) Construction Contractor Technical Proposals	Brian Lines, Feng Miao
3:15	495	Case Study Of A Feasibility Study For The Construction Of A Multi-Story Parking Through A Public Private Partnership In The University Of Puerto Rico With Community Participation	Darwin Serrano Maldonado, Giovanni Torres Suarez, Omar Molina-Bas

June 2, 2016- 3:45 pm-5:15 pm

Track: Organizational Issues, Productivity and Workforce Issues/Lean Construction (Room 201-B)			
Moderator: Carla López del Puerto			
Time	Paper ID	Title	Authors
Organizational Issues, Productivity and Workforce Issues			
3:45	106	Work-Life Balance Perceptions Of Young Project Engineers In The U.S.: Linking Their Career Intentions With Their Supervisor'S Role	Rodolfo Valdes-Vasquez, Mary Nobe, Mark Gillaspie, Duygu Akalp
Lean Construction			
4:00	128	Lean Practices And Safety Performance	John Gambatese, Catarina Pestana
4:15	114	Pull Planning System To Coordinate Engineering Procurement And Construction On Process Plant Projects	S. Anantharaman, Koshy Varghese
4:30	515	Web-Based 4D Visual Production Models For Decentralized Work Tracking And Information Communication On Construction Sites	Jacob Je-Chian Lin, Mani Golparvar-Fard
4:45			
5:00			

June 2, 2016- 3:45 pm-5:15 pm

Track: Data Sensing and Analysis (Room 202-C)			
Moderator: Nora El-Gohary			
Time	Paper ID	Title	Authors
3:45	288	Silhouette-Based On-Site Human Action Recognition In Single-View Video	Meiyin Liu, Dapeng Hong, Sanguk Han, Sanghyun Lee
4:00	381	Smart Application For Integrated Sensing, Simulation, And Feedback Of Occupant Behaviors To Enable Personalized Interventions For Energy Saving In Buildings	Peeraya Inyim, Triana Carmenate, Dalaidis Hidalgo, Maria Reyes, Diana Leante, Leonardo Bobadilla, Ali Mostafavi
4:15	618	State Of The Art Of Construction Analytics	Nader Naderpajough, Juyeong Choi, Makarand Hastak
4:30	356	Towards Part-Based Construction Equipment Pose Estimation Using Synthetic Images	Mohammad Soltani, Amin Hammad, Zhenhua Zhu
4:45	122	Trend On The Implementation Of Analytical Techniques For Big Data In Construction Research (2000-2014)	Behzad Abounia-Omran, Qian Chen
5:00			

June 2, 2016- 3:45 pm-5:15 pm

Track: Robotics and Automation (Room 203)			
Moderator: Julian Kang			
Time	Paper ID	Title	Authors
3:45	404	Marker Assisted Structure From Motion For 3D Environment Modeling And Object Pose Estimation	Chen Feng, Vineet Kamat, Carol Menassa
4:00	80	Unmanned Aerial Systems (Uass) For Construction Safety Applications	Masoud Gheisari, Behzad Esmaeili
4:15	261	Utilizing Light Unmanned Aerial Vehicles For Inspection Of Curtain Walls: A Case Study	Junshan Liu, Micheal Jenness, Paul Holley
4:30			
4:45			
5:00			

June 2, 2016- 3:45 pm-5:15 pm

Track: Construction Procurement and Financing (Room 204)			
Moderator: Wallied Orabi			
Time	Paper ID	Title	Authors
3:45	469	Potential Impact Of Bim-Based Cost Estimating In Conceptual Building Design: A University Building Renovation Case Study	Husam Wasmi, Daniel Castro-Lacouture
4:00	90	Project Work Structuring: Management Considerations And Performance Implications	Panagiotis Mitropoulos, Ricardo Sanchez
4:15	139	Impediments In Using Alternative Project Delivery Methods For Water And Wastewater Projects	Pramen Shrestha, Ruiko Maharjan, Jacimaria Batista
4:30	215	The Cost Of Capital For Road Concession Projects In Colombia: A Case Study Based On The Fourth Generation Concession Program (4G)	José Bravo, Carlos Arboleda
4:45	387	Utilization Of Value And Risk Assessments In Transportation Procurement: A Case Study Of A New Highway Corridor	Anthony Pesek, Jake Smithwick, Kristen Hurtado, Kenneth Sullivan
5:00	351	Analysis Of Funding Sources For Design-Build-Finance (Dbf) Public-Private-Partnerships (Ppp) Projects In The U.S. Transportation Sector	David Ramsey, Mounir El Asmar