

Conference Day 4 / Wednesday, August 28, 2024 / icccb24 Montreal

| ROOM | E2021 | E2022 | E2023 | E2024 | A1424 |
|-------|---|---|---|--|---|
| | H-1: Automation and robotics for construction Chair: Seulbi Lee | I-1: Asset management and maintenance management Chair: Sara Rankohi | B-9: Building Information Modelling Chair: Silvio Melhado | A-1: Analysis, simulation and sensing Chair: Jaka Dujc | V-3: Virtual session Chair: Stéphane Morin-Pépin |
| 9:10 | 16 - Investigating the Barriers to the Adoption of 3D Printing Technology in the Turkish Construction Industry Leva Latifiilkhechi SC , Saman Aminbakhsh, Emre Akcay | 30 - Data-based Assessment of the Resilience of Municipal Road Infrastructure as a Component of Sustainable Asset Management Alexander Buttgerit , Daniel Gogolin, Stefan Gomolluch, Uwe Reinhardt, Marko Tesic | 175 - A Theoretical Framework for Developing an LOD500 Level Production Process Model for Steel Structural Components Ming Lu, Ye Peng SC | 134-Simulation-Based Predictive Analytics for Construction Safety Incidents Abbey Dale Abellanos, Hamidreza Golabchi, Stephen Hague, Simaan AbouRizk, Yasser Mohamed. Presenter : Abbasianfar Vahid | 74-Enhancing information extraction from German Regulatory Documents using Deep learning Sherief Ali , Markus König |
| 9:30 | 67 - Development of automatic steel deck cutting system using a multi-axis robot for power plant construction work Tsuyoshi Yamada , Naoya Shinoda, Kazuyuki Takeuchi, Munechika Masaki | 8 - A review of blockchain-based S- Digital Twins in the AEC sector in the context of application Jascha Brötzmann , Uwe Rüppel | 183 - Comprehensive clash avoidance in multidisciplinary BIM coordination using a rule-based system Tabassum Mushtary Meem SC , Omar Doukari, Ivanka Iordanova | 77 - Dev. of an Electronic Guidance Device "eGuiDev" based on Wireless Communication Tech. for Pedestrian Navigation Abduaziz Juraboev, Abdulrahman Othman, Rüdiger Kern, Joaquin Diaz, Uwe Rüppel | 18-Autonomous navigation of quadruped robots for monitoring and inspection of civil infrastructure Aditya Tandon , Jan Stührenberg, Kosmas Dragos, Kay Smarsly |
| 9:50 | 68 - Toward future-proof Asset Information Management Marlena Block, Alexander Buttgerit, Markus König | 80 - Management of physical asset problem and possible solutions applicable through use of Spatial web tools Eleonora Franco SC | 197 - Comprehensive Analysis of Security and Privacy mechanisms in CDE based BIM collaboration Anja Brelih SC , Robert Klinc | 227 - Interactive light and sound-sensitive mortar for architectural environments Karina Hwang Arcolezi SC , Bora Ung, Claudiane Ouellet-Plamondon | 17-Multi-agent-based swarm gas source localization using nano aerial robots Jan Stührenberg, Felix Häusler, Patrick Neumann, Kosmas Dragos , Kay Smarsly |
| | H-2: Automation and robotics for construction Chair: Claudiane Ouellet-Plamondon | I-2: Asset management and maintenance management Chair: Alexander Buttgerit | B-10: Building Information Modelling Chair: Silvio Melhado | A-2: Analysis, simulation and sensing Chair: Uwe Rueppel | V-4: Virtual session Chair: Stéphane Morin-Pépin |
| 10:30 | 211 - Multi-Objective Optimization of a Sustainable Ternary Mortar for 3D Printing Willy Jin SC , Claudiane Ouellet-Plamondon, Jean-François Caron French Presentation | 247 - Analysis of software solutions to find the most suitable project delivery model Simon Becker SC , Philip Sander | 236 - The IPD contract methodology as a strategic element in the management of building projects Paula da Silva SC , dalberto Fischman, Sergio Scheer, Silvio Melhado | 114 - Formation process simulation method based on the real construction data for vibro stone columns Daoxiang Chen SC , Peng Lin, zhiwei zhang, Guo Li | 40 - Digital Twins, architectures, and elements in civil engineering – A multivocal literature review Kay Smarsly, Muhammad Ahmad, Patricia Peralta, Thamer Al-Zuriqat, Heba Al-Nasser, Kosmas Dragos , Carlos Chillón Geck |
| 10:50 | 84 - Electrodermal Activity as an Indicator of Cognitive Load for Human-Robot Collaboration in Construction Seulbi Lee , Bogyeeong Lee | 59 - Where Project Governance and Sustainability Meet? A Literature Review Sara Rankohi , Caroline Coulombe, Nathalie Drouin, Mario Bourgault, Robert Pellerin, Jonathan Harvey | 246 - First Investigations of Advanced Operators for Consistent Spatial Modeling the Built Environment Maximilian Sternal , Sebastian Oswald, Wolfgang Huhnt | 224 - Automated FEM-Based Determination of Thermal Diffusivity and Temperature Profile for Rockfall Prediction Jaka Dujc , Mateja Jemec Aulfić | 39 - A smart monitoring approach based on decentralized S- Digital Twins Kosmas Dragos SC , Kay Smarsly |
| 11:10 | 242 - An Assessment of The Usage of Collaborative Robotics in the South African Construction Industry Ayanda Boya SC , Opeoluwa Akinradewo, Clinton Aigbavboa | 75 - Achieving best value: benefits and shortcomings of recent amendments to the Act respecting contracting by public bodies Gabriel Jobidon , Antoine Pellerin French Presentation | | 163-Prototyping a Wireless Hardware System for Automated Collection and Transmission of Audio and Kinematic Data at Construction Jobsites SeyedeZahra Golazad, Farzad Ordubadi, Abbas Mohammadi, Armin Tajalli, Abbas Rashidi, Sadegh Asgari | 117 - Correlating Interfacial Shear Strength and Material Properties in Fiber-Reinforced Composites Soheila Kookalani , Erika Parn, Ioannis Brilakis, Rongyan Li, Zhiqi Hu |