**Congratulation to CASE2021 Awards finalists.** All finalists are invited to participate in the corresponding Award Competition Session during the conference with live presentation of their paper and questions-answers (online or in person).

**IEEE CASE2021 Best Student Paper Award Finalists:**

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| **Number** | **Title** | **Authors** | **Student** |
| 23 | Including Sparse Production Knowledge into Variational Autoencoders to Increase Anomaly Detection Reliability | Tom Hammerbacher\*, Markus Lange-Hegermann, Gorden Platz (Germany) | Tom Hammerbacher |
| 105 | Synthesis and Implementation of Distributed Supervisory Controllers with Communication Delays | Lars Moormann\*, Reinier Hendrik Jacob Schouten, Joanna Maria Van de Mortel-Fronczak, Wan Fokkink, Jacobus E. Rooda (Netherlands) | Lars Moormann |
| 271 | Optimal Planning of Internet Data Centers Decarbonized by Hydrogen-Water-Based Energy Systems | JINHUI LIU, Zhanbo Xu\*, Jiang Wu, kun liu, Xunhang Sun, Xiaohong Guan (China) | JINHUI LIU |
| 297 | Deep Reinforcement Learning for Prefab Assembly Planning in Robot-Based Prefabricated Construction | Zhu Aiyu\*, Gangyan Xu, Pieter Pauwels, Bauke de Vries, Meng Fang (Netherlands) | Zhu Aiyu |
| 370 | Designing a User-Centred and Data-Driven Controller for Pushrim-Activated Power-Assisted Wheels: A Case Study | Mahsa Khalili\*, H.F. Machiel Van der Loos, Jaimie Borisoff (Canada) | Mahsa Khalili |
| 568 | Singularity-Aware Motion Planning for Multi-Axis Additive Manufacturing | Charlie C.L. Wang\*, Tianyu Zhang, Xiangjia Chen, Guoxin Fang, Yingjun Tian (United Kingdom) | Tianyu Zhang |

**IEEE CASE2021 Best Conference Paper Award Finalists**

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| **Number** | **Title** | **Authors** |
| 159 | Probabilistic Movement Primitive Control Via Control Barrier Functions | Mohammadreza Davoodi, Asif Iqbal, Joe Cloud, William Beksi, Nicholas (Nick) Gans\* (USA) |
| 318 | Extended Fabrication-Aware Convolution Learning Framework for Predicting 3D Shape Deformation in Additive Manufacturing | Yuanxiang Wang, Cesar Ruiz, Qiang Huang\* (USA) |
| 347 | Efficient Optimization-Based Falsification of Cyber-Physical Systems with Multiple Conjunctive Requirements | Logan Mathesen\*,Giulia Pedrielli,Georgios Fainekos (USA) |

**IEEE CASE2021 Best Application Paper Award Finalists:**

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| 329 | A Seamless Workflow for Design and Fabrication of Multimaterial Pneumatic Soft Actuators | Lawrence Smith, Travis Hainsworth, Zachary Jordan, Xavier Bell, Robert MacCurdy\* (USA) |
| 335 | OpenUAV Cloud Testbed: a Collaborative Design Studio for Field Robotics | Harish Anand,Stephen A. Rees,Zhiang Chen,Ashwin Jose Poruthukaran,Sarah Bearman,Lakshmi Gana Prasad Antervedi\*,Jnaneshwar Das (USA) |

**IEEE CASE2021 Best Healthcare Automation Paper Award Finalists: 63, 212, 215**

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| **Number** | **Title** | **Authors** |
| 63 | Hospital Beds Planning and Admission Control Policies for COVID-19 Pandemic: A Hybrid Computer Simulation Approach | Yiruo Lu, Yongpei Guan, Xiang Zhong\*, Jennifer Fishe, Thanh Hogan (USA) |
| 212 | Rollout-Based Gantry Call-Back Control for Proton Therapy Systems | Feifan Wang, Yu-Li Huang, Feng Ju\* (USA) |
| 215 | Progress in Development of an Automated Mosquito Salivary Gland Extractor: A Step Forward to Malaria Vaccine Mass Production | Wanze Li, Zhuoqun Zhang, Zhuohong He, Parth Vora, Alan Lai, Balazs Vagvolgyi, Simon Leonard, Anna Goodridge, Ioan Iulian Iordachita, Stephen L. Hoffman, Sumana Chakravarty, B Kim Lee Sim, Russell H. Taylor\* (USA) |