



AOSEC 2023

Asia Oceania Systems Engineering Conference

Theme: Digitalization for engineering Complex Systems

11th - 14th October, 2023 | HAL Management Academy Auditorium, Bengaluru

Hosted by



India Chapter

Conference Day 2 - Friday, 13 October 2023

| Start Time | End Time | Total time | Agenda | Location | Speakers |
|------------|----------|------------|--|---------------|---|
| 9:00 AM | 9:15 AM | 00:15 | Day 2 Welcome | Main hall | |
| 9:15 AM | 10:00 AM | 00:45 | <i>Keynote -1</i> | Main hall | |
| 10:00 AM | 11:00 AM | 01:00 | Panel Discussion | Main hall | Stueti Gupta - EWLSE |
| 11:00 | 11:30 AM | 00:30 | High Tea | | - |
| 11:30 AM | 11:55 AM | 00:25 | Overcome Certification Challenges of AI/ML Based Airborne Systems Using FAA Overarching Properties | <i>Hall 1</i> | Prameela Paramasivam, Shashi Kumar P, Vasantha Selvi Paulraj and Rooparani Chandrashekar |
| | | | FPGA Implementation of Adaptive PID Control for Quadcopter Position Tracking | <i>Hall 2</i> | Harish Bhat N, Shreesha Chokkadi and Satish Shenoy B. |
| | | | Systematic Model of Leadership Approaches | <i>Hall 3</i> | Srimannarayana Myla, Karel Marshall, Bcm Mabuza Bcm Mabuza, Aleksandra Scalco and Jack Sutherland |
| | | | Digital Thread as a foundation for Digital Engineering and Manufacturing of Complex Cyber-physical systems | <i>Hall 4</i> | Manas Bajaj |

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| 11:55 AM | 12:20 PM | 00:25 | AI enabled Digital Transformation space Test system | Hall 1 | Prabhat Kumar, Deepak Kumar and Goutham Sridharan |
| | | | Modernizing Engineering Data Documentation in Air Cargo System | Hall 2 | Mallikarjun Awarad, Venkata Sindhi Tadigotla and Suresh Krishnan |
| | | | Dynamic Reliability Analysis using Model Based Systems Engineering | Hall 3 | Vaisakh Haridasan Nair, Karishma Khatija, Mansi Shah, Subramanian Tenkasi Ramesh, Deepali Purohit and Akanksha Tiwari |
| | | | HyperCube: From Operational Analysis to System Requirements | Hall 4 | Muntazir Merchant, Mudit Mittal |
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| 12:20 PM | 12:45 PM | 00:25 | NISAR S-SAR Digital Beamforming Architecture and Implementation | Hall 1 | Rakesh Kumar, Suneela Mishra, Anish Kumar Mishra and Diksha Sharma |
| | | | Model-Based System Engineering in highly Configurable and Customizable Avionics Systems | Hall 2 | Hariprasad Murugesan, Arutchelvan Karunanidhi, Rathan Natarajan, Arunkumar Janarthanan and Deepakkumar Ganesamurthy |
| | | | The Human-in-the-loop in Systems Engineering | Hall 3 | Raul Leal |
| | | | A case study on optimizing New Product Development through Customer Centric Systems approach | Hall 4 | Rathish Arumugam, Jayaarun Prasanth, Shruti Raje, Mudit Mittal and Stueti Gupta |
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| 12:45 PM | 1:45 PM | 01:00 | Lunch | | |
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| 1:45 PM | 2:10 PM | 00:25 | Neural Network-based Method to Compute Recommended Cruise Level and Optimal Climb Location | Hall 1 | Dinesh Kumar Kushwaha, Mark Volner, Ryan Young and Sebin K Kottackal |
| | | | Development of Safety-Critical Flight Software Using the Model-Based Co-Simulation Approach | Hall 2 | Anand G, Manju Nanda and Ezhil Venthan |
| | | | Systems Thinking through Ansoff's Matrix | Hall 3 | Swapnil Bhosale |

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| | | | Performance Analysis of Electro- Hydraulic Actuation System using Multi-Domain Physics-Based Modeling | Hall 4 | Hari Krishna Pavan Kumar Kollipara, Venkata Kaushik Belusonti, Venkateswaran Krishnasamy, Aeja Kadri and Suk-Min Moon |
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| 2:10 PM | 2:35 PM | 00:25 | Systems Engineering - An Enabler for Atmanirbhar Bharat in the Defence Sector | Hall 1 | Virendra Vikram Vishen |
| | | | SASER in Practice: Early Insights from Two Case Studies Connected to Industry | Hall 2 | Jan A. Lenssen, Usama Ahmed, Kostas Nizamis, Marcus V. Pereira Pessoa and G. Maarten Bonnema |
| | | | Towards an Enterprise Architecture Methodology for Development of Product Service Systems in Construction Domain | Hall 3 | Jagadish Suryadevara and Johan Bergelin |
| | | | Modeling and Simulation of electro-mechanical systems for aerospace applications | Hall 4 | Ashok Kumar Thirunarayana and Adishesha Sivaramasastry |
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| 2:35 PM | 3:00 PM | 00:25 | Revisiting large scale defence acquisition: uncertainty and acquisition responsiveness | Hall 1 | Mahmoud Efatmaneshnik, Peter De Haan and Ady James |
| | | | Reduced Order Modeling of a Heat Exchanger with a Multi-layered Stacking Ensemble to reduce Computational Inefficiencies | Hall 2 | Roopa Adepu and Vinayak V. Chandran |
| | | | A technique of X-PROP verification of power-aware debug logic integration using formal verification techniques | Hall 3 | Jayashri Patil, Surinder Sood, Manu Yeeshu, Nisha Philip, Aswani Yendluri and Sweetie Pinjani |
| | | | System Engineering approach on life cycle dynamics of Off-Highway Applications | Hall 4 | Sourabha Gokhale and Mohan Vadnere |
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| 3:00 PM | 3:30 PM | 00:30 | High Tea | | - |
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| 3:30 PM | 5:00 PM | 01:30 | Panel Discussion | Main hall | Marco |
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| 5:00 PM | 5:30 PM | 00:30 | <i>Closing Talk (Summarize, Goodies, Quiz)</i> | Main hall | - |
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