



Hosted by



India Chapter

AOSEC 2023

Asia Oceania Systems Engineering Conference

Theme: Digitalization for engineering Complex Systems

11th - 14th October, 2023

Venue: HAL Management Academy Auditorium, Bengaluru



Conference Brochure

Invitation



Welcome to the 14th Asia Oceania Systems Engineering Conference (AOSEC) - a premier international conference on Systems Engineering in the Asia Oceania region. AOSEC has become a well-established platform for knowledge sharing and collaboration among experts in the field of systems engineering.

We are excited to announce that AOSEC 2023 will be held in Bangalore, India, from October 11th to 14th, 2023. The conference will bring together academicians, researchers, and industry practitioners from around the world to discuss and exchange ideas on the latest advancements and emerging trends in systems engineering.

The conference theme for AOSEC 2023 is "Digitalization for Engineering Complex Systems." Model Based tools and techniques enabled by interoperability leverage Systems Engineering to manage complex product and service development. Attendees can expect to hear from leading experts in the field, participate in engaging workshops, and network with peers from around the world.

We invite you to join us at AOSEC 2023 to contribute to this vibrant community of systems engineering professionals. It is a valuable opportunity to stay up-to-date with the latest advancements in the field, exchange ideas, and share your research findings and experiences.

We look forward to your active participation in AOSEC 2023 and to seeing you in Bangalore, India.



Organizing Committee



Chief Patron(s)



Ms. Merillee Wheaton
Aerospace-SERC Doctoral Fellow,
INCOSE President



Dr. Niranjan Kalyandurg
Honeywell



Mr. Savyasachi Srinivas
Collins



Mr. Krupal Aerpula
Boeing

Conference Advisory Board



Dr. Rajalakshmi Menon
Chairman



Dr. Serge Landry
Chairman



Dr. Ramakarishnan Raman
Chairman



Dr. Abhay Pashilkar
Chair



Dr. Yogananda Jeppu
Co-Chair

Conference Chair

Organizing Committee (OC)



Mr Mudit Mittal
Chair



Mr Akshay Vidap
Co-Chair



Ms Neha Tiwari
Marketing

Program Committee



Ms Stueti Gupta
Chair



Ms Aparna Kansal
Co-Chair



Ms Arpita Srivastava
Communication

Technical Program Committee (PC)



Mr Prasanna Ramamurthy
Chair



Mr Yatin Jayawant
PC Member

Sponsorship Committee



Cdr Virendra V Vishen (Retd)
Chair

Registration Details



Category		Discount %	Actual Cost	Discount	Full Fee	With GST (18%)
Main Conference	Early Bird Non-Member	10.00%	7500	750	6750	7965
	Early Bird Member	20.00%	7500	1500	6000	7080
	Post 16 Sept Non member	0.00%	7500	0	7500	8850
	Post 16 Sept Member	10.00%	7500	750	6750	7965
Main Conference + 1 Day Workshop	Early Bird Non-Member	10.00%	8500	850	7650	9027
	Early Bird Member	20.00%	8500	1700	6800	8024
	Post 16 Sept Non Member	0.00%	8500	0	8500	10030
	Post 16 Sept Member	10.00%	8500	850	7650	9027
Main Conference + 2 Day Workshop	Early Bird Non-Member	10.00%	9500	950	8550	10089
	Early Bird Member	20.00%	9500	1900	7600	8968
	Post 16 Sept Non member	0.00%	9500	0	9500	11210
	Post 16 Sept Member	10.00%	9500	950	8550	10089
International Delegate	Early Bird till 15 Sept 2023	USD 175				
	Regular Post 16 Sept 2023	USD 225				

Important Guidelines:

- Conference Registration is mandatory for all the delegates
- Please ensure to wear a registration badge (Bar/QR Coded) in the conference area.
- Registration is non-transferable
- PG Students will have to submit a no-objection letter from HOD-Head of the Department/Institute
- Please mention your registration number in all future correspondence with Conference Secretariat
- For spot registrations: Payment will be accepted only by mode of cash/card. The disbursal of the delegate kit for the same will be subject to the availability.
- Delegate kit would be handed over only to the registered delegate.
- Entry of the Associate Delegate may be restricted to certain areas at the venue of the Event
- 03% Bank charges will be applicable for registration
- Please provide your AOSEC membership number if applicable
- Conference organizers are not responsible for postal delays /failure of deliver by post or failure of electronic communication

Registration Inclusions:

- For Delegates
- Conferences Kit | Inaugural & Valedictory Functions | Conference Sessions
- Lunch on Conference Days | Dinners and Cultural Evening
- Entry for Trade/Exhibition Area

Registration Fee Does Not Include:

- Airport Transfers
- Accommodation
- Travel insurance

[Click here for Registration](#)

Scientific Program



Conference Day 1 - Thursday, 12 October 2023

Start Time	End Time	Total time	Agenda	Location	Speakers
9:00 AM	9:15 AM	0:15	Invite talk and Lamp Lighting	Main hall	
9:15 AM	9:45 AM	0:30	Keynote -1 [Chief guest address]	Main hall	
9:45 AM	10:30 AM	0:45	Keynote -2	Main hall	
10:30 AM	11:15 AM	0:45	Keynote -3	Main hall	
11:15 AM	11:45 AM	0:30	High Tea		
11:45 AM	12:10 PM	0:25	Modelling Systems with Intangible Boundaries Using SysML: An Automotive Feature Modelling Guideline	Hall 1	Raturaj Digraskar, Dharendra Singh, Shruti Raje and Mudit Mittal
			Model-Based Approach for the Indigenous Civil Aircraft Digital Anti-Skid Brake Management System (DASBMS) – Adopting the Systems Engineering	Hall 2	Manju Nanda, Alexander Kale, Viswanathan S, Shamsundar Dhage, Ganesh Madhuranath, Pradeep Kumar B and Shrilatha Acharya
			Digital Threads – benefits, challenges and best practices	Hall 3	Eran Gery
			Teaching Model Based System Engineering – A Banking Benchmark Problem	Hall 4	Aditya Jeppu, Azra Nasreen and Mudit Mittal
12:10 PM	12:35 PM	0:25	Design toolchain for automotive E/E architecture exploration	Hall 1	Jean-Baptiste Laurent, Julien Richefeu and Bruno Monsuez
			System Engineering Approach for Development of Flight Control Actuators and Hydraulic System Simulation Model for a Modern Stealth Fighter	Hall 2	Tanveer Ahmad Rubani and Kiran Kumar M
			Adopting MBSE with True Business Value in Client Context	Hall 3	Prashant Chouhan and Nishant Mehta
			Utilizing MBSE for disposable intravenous infusion set: A case study on systems thinking in medical device industry	Hall 4	Ashish Mehta, Mohammed Mehtab Khan, Akshay Vidap, Ankita Jawale and Manjunath Mangumali
12:35 PM	1:00 PM	0:25	Architecture-Centric Model-Based Systems Engineering at Continental	Hall 1	Enrico Seidel and Marco Forlingieri
			System of Systems Modeling for Urban Air Mobility Concept	Hall 2	Dhirendra Singh
			CONNECT PRODUCT & ENTERPRISE ARCHITECTURE THANKS TO DIGITAL & SYSTEMS THINKING COMBINATION	Hall 3	Ganesh Chavan and Pierre-André Vandelle
			Design and Dynamic analysis of Artificial Heart Model	Hall 4	Ambarish Narayanaswamy and Dr. Hanumantharaju H G
1:00 PM	2:00 PM	1:00	Lunch		
2:00 PM	2:25 PM	0:25	Approach to Evaluation of Alternative System Architectures	Hall 1	Payal Parate and Naveen Alle
			Systems Engineering - An Enabler for Atmanirbhar Bharat in the Defence Sector	Hall 2	Virendra Vikram Vishen
			MDSE based Framework for Cloud Migration	Hall 3	Suresh Padmanabhan, Lokesh Katiyar and Gaurav T Sanjay
			Systems Engineering and Safety Assurance for Project Manager	Hall 4	Miran Mukerji

Scientific Program



2:25 PM	2:50 PM	0:25	A Benchmark Example of Intelligent Traffic Management System using Artificial Intelligence	Hall 1	Jyothi Priya R, Prameela Paramasivam, Thava Bharathi Kanagaraj and Sivasankari Paramasivan
			Digitalization for Engineering Aerospace Systems - case study from Airbus	Hall 2	Nitish Saroj Kumar and Srivats Srinivasan
			Digital Thread Development for end to end traceability of smart glazing system	Hall 3	Rathish Arumugam, Jayaarun Prasanth, Tanmay Dubey, Mudit Mital and Stueti Gupta
			System Engineering Approach on IGTS-Patient Support (Tables)	Hall 4	Sharad Rayguru and Rahul Dhokale
2:50 PM	3:15 PM	0:25	Enhancing Operator Visibility and Safety in Agricultural Machinery using LIN-based Programmable Wipers, Smart Calibration Technique and Rain Sensing Algorithm	Hall 1	Rajeev Rao, Ashwini Jadhav and Pradnya Muchandi
			Engineering Sustainable System of Systems: A Holistic Approach for a Brighter Future	Hall 2	Marco Forlingieri and Andreas Gschwind
			MBSE from concept to implementation with Harmony MBE	Hall 3	Eran Gery
			Towards an Enterprise Architecture Methodology for Development of Product Service Systems in Construction Domain	Hall 4	Jagadish Suryadevara and Johan Bergelin
3:15 PM	3:45 PM	0:30	High Tea		
3:45 PM	4:45 PM	1:00	Sponsors Lightning round	Main hall	
4:45 PM	5:15 PM	0:30	Closing Keynote	Main hall	
5:15 PM	5:30 PM	0:15	Closing Talk (Summarize, Goodies, Quiz)		
0.8125	0.916666667		Dinner / Cultural Event		

Scientific Program



Conference Day 2 - Friday, 13 October 2023					
Start Time	End Time	Total time	Agenda	Location	Speakers
9:00 AM	9:15 AM	0:15	Day 2 Welcome	Main hall	
9:15 AM	10:00 AM	0:45	Keynote -1	Main hall	
10:00 AM	11:00 AM	1:00	Panel Discussion	Main hall	Stueti Gupta - EWLSE
11:00 AM	11:30 AM	0:30	High Tea		-
11:30 AM	11:55 AM	0:25	Modernizing Engineering Data Documentation in Air Cargo System	Hall 1	Mallikarjun Awarad, Venkata Sindhi Tadigotla and Suresh Krishnan
			FPGA Implementation of Adaptive PID Control for Quadcopter Position Tracking	Hall 2	Harish Bhat N, Shreesha Chokkadi and Satish Shenoy B.
			Systematic Model of Leadership Approaches	Hall 3	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	Hall 4	Manas Bajaj
11:55 AM	12:20 PM	0:25	Risk Investigation of Navigational Configuration towards Design Adequacy for Airworthiness of Military UAV	Hall 1	Aditya Kumar Mishra, Dr Mathews P Samuel and L N Raghavendra
			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 Khathija, Mansi Shah, Subramanian Tenkasi Ramesh, Deepali Purohit and Akanksha Tiwari
			A frugal scheme for securing in-vehicle CAN traffic	Hall 4	Aniket Bhattacharya and Pavankumar Adinarayan Saladi
12:20 PM	12:45 PM	0:25	HyperCube: From Operational Analysis to System Requirements	Hall 1	Muntazir Merchant, Mudit Mittal
			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
12:45 PM	1:45 PM	1:00	Lunch		

Scientific Program



1:45 PM	2:10 PM	0:25	<i>Neural Network-based Method to Compute Recommended Cruise Level and Optimal Climb Location</i>	Hall 1	Dinesh Kumar Kushwaha, Mark Volner, Ryan Young and Sebin K Kottackal
			<i>Development of Safety-Critical Flight Software Using the Model-Based Co-Simulation Approach</i>	Hall 2	Anand G, Manju Nanda and Ezhil Venthan
			<i>Systems Thinking through Ansoff's Matrix</i>	Hall 3	Swapnil Bhosale
			<i>Performance Analysis of Electro- Hydraulic Actuation System using Multi-Domain Physics-Based Modeling</i>	Hall 4	Hari Krishna Pavan Kumar Kollipara, Venkata Kaushik Belusonti, Venkateswaran Krishnasamy, Aejaj Kadri and Suk-Min Moon
2:10 PM	2:35 PM	0:25	<i>Revisiting large scale defence acquisition: uncertainty and acquisition responsiveness</i>	Hall 1	Mahmoud Efatmaneshnik, Peter De Haan and Ady James
			<i>SASER in Practice: Early Insights from Two Case Studies Connected to Industry</i>	Hall 2	Jan A. Lenssen, Usama Ahmed, Kostas Nizamis, Marcus V. Pereira Pessoa and G. Maarten Bonnema
			<i>NISAR S-SAR Digital Beamforming Architecture and Implementation</i>	Hall 3	Rakesh Kumar, Suneela Mishra, Anish Kumar Mishra and Diksha Sharma
			<i>Modeling and Simulation of electro-mechanical systems for aerospace applications</i>	Hall 4	Ashok Kumar Thirunarayana and Adishesha Sivaramasastry
2:35 PM	3:00 PM	0:25	<i>AI enabled Digital Transformation space Test system</i>	Hall 1	Prabhat Kumar, Deepak Kumar and Goutham Sridharan
			<i>Reduced Order Modeling of a Heat Exchanger with a Multi-layered Stacking Ensemble to reduce Computational Inefficiencies</i>	Hall 2	Roopa Adepu and Vinayak V. Chandran
			<i>A technique of X-PROP verification of power-aware debug logic integration using formal verification techniques</i>	Hall 3	Jayashri Patil, Surinder Sood, Manu Yeeshu, Nisha Philip, Aswani Yendluri and Sweetly Pinjani
			<i>Towards an Enterprise Architecture Methodology for Development of Product Service Systems in Construction Domain</i>	Hall 4	Jagadish Suryadevara and Johan Bergelin
3:00 PM	3:30 PM	0:30	High Tea		
3:30 PM	5:00 PM	1:30	<i>Panel Discussion</i>	Main hall	Marco
5:00 PM	5:30 PM	0:30	<i>Closing Talk (Summarize, Goodies, Quiz)</i>	Main hall	

Tourist Attraction



Bengaluru (also called Bangalore) is the capital of India's southern Karnataka state. The center of India's high-tech industry, the city is also known for its parks and nightlife. By Cubbon Park, Vidhana Soudha is a Neo-Dravidian legislative building. Former royal residences include 19th-century Bangalore Palace, modeled after England's Windsor Castle, and Tipu Sultan's Summer Palace, an 18th-century teak structure.

Krishnarajendra Market is a vibrant, old-fashioned bazaar, with fruit and flower vendors. The Lalbagh Botanical Garden has a traditional glass house and tropical flora. Modern and contemporary Indian art is on view at National Gallery of Modern Art. Karnataka Chitrakala Parishath, with 13 museums, is known for local traditional art. Dodda Basavana Gudi ("Bull Temple") is an example of 16th-century Dravidian architecture. The 1995 Iskcon Krishna Temple combines modern and ancient architectural styles. Just outside the city is Bannerghatta Biological Park, home to tigers, lions and elephants.

WHEN TO VISIT

Bengaluru has a tropical savanna climate, with warm to hot weather year-round. The monsoon period, May–Oct, is the rainy season with tropical downpours. Nov–Apr is generally dry. The city is a year-round destination, but May–Jun and Dec–Jan are particularly popular months to visit. Key events include traditional Hindu festivals, like Dussehra (aka Dasara) in Oct, with colorful street processions. Diwali (Oct/Nov) is the festival of lights with candles, sparklers and fireworks.

Places To Visit

Lalbagh Botanical Garden

Created by Emperor Hyder Ali in 1760, it is a one of a kind garden and has earned a place among the gardens of the world and it has come to be viewed as one of the best gardens in the East for its design, maintenance, scientific treasure and scenic beauty.



Cubbon Park

Located in the heart of the city is these 300 acres of greenery. Perfect for those looking for a leisurely walk and tasty street food. Within this is an aquarium and children's park with the famous toy train for your little ones.



Bannerghatta Biological

Bannerghatta National Park, near Bangalore, Karnataka, was founded in 1970 and declared as a national park in 1974. In 2002 a portion of the park, became a biological reserve, the Bannerghatta Biological Park.



Places To Visit

Wonderla

Travelling with kids? Wonderla is one of the best places to visit in Bengaluru. A world of thrilling rides, splashing waters and lip-smacking food awaits you and your family at Wonderla. The Jungle Lagoon, Lazy River and Boomerang are some of the most popular rides.



Tipu Sultan's Summer Palace

Once the official residence of Tipu Sultan, this grand palace, constructed entirely out of teak, has now been converted into a museum, and is one of the top places to visit in Bengaluru. Beautiful paintings, magnificent sculptures and antiques adorn the interiors and will make you feel like you're walking through history.



Vidhana Soudha

The seat of the state legislature in Karnataka, the Vidhana Soudha is a 46-metre-tall structure comprising 300 rooms. Dravidian influences are prominent in this architectural marvel, which houses several departments of the Government of Karnataka. It's also one of the largest state assemblies in the country.



Nandi Hills

At approximately 60 km from the city is this ancient hill fort built by Tipu Sultan. It also houses the Bhoganandeeswara temple. This place is famous for the scenic beauty during sunrise.



Shopping

You could spend a leisurely day at Commercial street, one of the oldest and busiest shopping areas of the city. The street is famous for clothes, footwear, jewellery, electronics; and food joints.



**In order to book the tours,
you may contact
Mr. Manjeet Singh
Mob.: +91 9717626667**

SUMMIT-ALPCORD NETWORK
1201, 12th Floor, New Delhi House
27, Barakhamba Road, New Delhi-110001, India
Website: www.alpcord.com

Organizing Partner

Organizing Partner

Organizing Partner

Partnering with

Title Sponsor

Platinum Sponsor

Silver Sponsor

Silver Sponsor



Conference Manager



SUMMIT ALPCORD NETWORK
Event & Conferences Management Company Pvt. Ltd.

Mr. Milan Singh

Email: aosec2023@gmail.com | Mobile: +91 9910609688

For more details visit: www.aosec2023.in

