INDISCON 2025

21 – 23 August 2025

Organized by IEEE Rourkela Subsection and IEEE India Council Hosted by NIT Rourkela, Odisha, India

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Abstract of Day 1 (21.08.2025)

8.30 am – 9.30 am	9.30 am – 10.30 am	10.3 0 - 11.0 0 am	11.00 am – 11.45 am	11.45 am - 12.30 pm	12.30 pm – 1.30 pm	1.30 pm – 2.30 pm	2.30 pm – 4.15 pm	4.15 pm – 4.45 pm	4.45 pm - 5.15 pm	5.15 pm – 7.00 pm
				2)	TS 11 (EV) (4)		TS 21 (AI & ML) (7)	Prof. Josep M. Jornet, IEEE Fellow Northeastern University, USA (IT 1) (VR1)		TS 31 (AI & ML) (8)
3)	(guilding		ber ACM 3uilding)	.T, USA (K2) 3)	TS 12 (NW) (4)		TS 22 (AI & ML) (7)	Prof. B. D. Subudhi, Director, NIT Warangal (IT 2) (VR2)	sion	TS 32 (AI & ML) (8)
Registration TIIR Building)	Inauguration (Auditorium, TIIR Building)	reak	Dr. Ashutosh Dutta, IEEE Fellow, Distinguished Member ACM JHU USA (K1) (Auditorium, TIIR Building)	EE Fellow, Distinguished Membe IU USA (K1) (Auditorium, TIIR Bu Prof. Sajal K. Das, Fellow, Missouri University S&T, (Auditorium, TIIR Building)	TS 13 (IoT) (4)	Conference Lunch	TS 23 (EV) (7)	Dr. Amit Mishra, Director, National Spectrum Center (NSC- UK) (IT 3) (VR3)	High Tea & Networking Session	TS 33 (AI & ML) (7)
Conference l (Auditorium,	on (Audito	Tea Break	Dr. Ashutc v, Distingu <1) (Audito	Prof. Sajal K. Iissouri Unive Jitorium, TIIR	TS 14 (Sensors) (4)	Conferen	TS 24 (VLSI) (7)	Prof. S. K. Patra, Director, NIT Agartala (IT 4) (VR4)	ea & Netv	TS 34 (VLSI) (8)
Col (Auc	Inauguratio		I IEEE Fellow JHU USA (K	IEEE Fellow, IV (Auc	TS 15 (NexGen) (4)		TS 25 (PE PS) (7)	Dr. Tushar Vrind, Senior Technical Director, Samsung Semiconductor India R &D (SSIR) (IT 5) (VR5)	High T	TS 35 (PE PS) (8)
					TS 16 (Mix) (4)		TS 26 (Signals) (7)	Prof. Sudip Mishra, IEEE Fellow, IIT Kharagpur (IT 6) (VR6)		TS 36 (IoT) (8)

TS: Technical Session; K: Keynote; IT: Invited Talk

Please check for the Venue details on the following page.

Technical Session Schedule details (Day 1)

Day/ Date	Time	Session Number	Venue	VR Code	Assigned PIDs
		Technical Session 11: (EV) (4)	LAII-002	VR1	1867, 2177, 2367, 2508
		Technical Session 12: (NW) (4)	LAII-006	VR2	787, 1139, 1407, 1484
	12.30	Technical Session 13: (IoT) (4)	LAII-009	VR3	45, 767 , 769, 1225, 2802
	pm –	Technical Session 14: (Sensors) (4)	LAII-012	VR4	892, 1475, 1533, 1544
	1.30 pm	Technical Session 15: (NexGen) (4)	LAII-104	VR5	1284, 1306, 2221, 2361
		Technical Session 16: (Mix) (4)	LAII-118	VR6	296, 408, 3583, 3637
25)		Technical Session 21: AI & ML (7)	LAII-002	VR1	30, 196, 198, 200, 505, 584,747
(21.08.2025)	2.30 pm	Technical Session 22 (AI & ML) (7)	LAII-006	VR2	763, 764, 770, 798, 836, 857, 864
80:		Technical Session 23: (EV) (7)	LAII-009	VR3	2529, 2575, 2618, 2628, 2635, 2720, 3720
(21	- 4.15	Technical Session 24: (VLSI) (7)	LAII-012	VR4	724, 1094, 1188, 1251, 1825, 1834, 3718
71	pm	Technical Session 25: (PE PS) (7)	LAII-104	VR5	42, 43, 44, 546, 840, 846, 1267
Day		Technical Session 26: (Signals) (7)	LAII-118	VR6	276, 654, 971, 1019, 1775, 1794, 1902
	5.15 pm	Technical Session 31: (AI & ML) (8)	LAII-002	VR1	957, 976, 996, 1026, 1080, 1088, 1125, 1189
	− 7.00	Technical Session 32: (AI & ML) (8)	LAII-006	VR2	1214, 1269,1330, 1352, 1559, 1565, 1580, 1588
	pm	Technical Session 33: (AI & ML) (7)	LAII-009	VR3	1605, 1727 , 1744, 1750, 1799, 1800, 1804, 1849
		Technical Session 34: (VLSI) (8)	LAII-012	VR4	1861, 2008, 2049, 2091, 2218, 2355, 2428, 2459
		Technical Session 35: (PE PS) (8)	LAII-104	VR5	1274, 1561, 1641, 1832, 1835, 1854 , 1874, 1932 , 1964
		Technical Session 36: (IoT) (8)	LAII-118	VR6	1417, 1421, 1466, 1492, 1508, 1961, 2196, 2242

Abstract of Day 2 (22.08.2025)

8.00 am – 9.45 am	9.45 am – 11.30 am	11.30 am – 11.45 am	11.45 am – 12.30 pm	12.30 pm – 1.30 pm	1.30 pm – 2.30 pm	2.30 pm – 4.15 pm	4.15 pm – 4.45 pm	4.45 pm - 5.15 pm	5.15 pm – 7.00 pm
TS 41 (AI & ML) (7) TS 42 (AI & ML) (7) TS 43 (EV)	TS 51 (AI & ML) (8) TS 52 (AI & ML) (8) TS 53 (PE PS)		Bhattacharya, ryland, USA (K3) (LA II – 118) 6)	TS 61 (AI & ML) (4) TS 62 (AI & ML) (4) TS 63 (EV)	Lunch	TS 71 (AI & ML) (7) TS 72 (AI & ML) (7) TS 73 (NW)	Dr. Alok Ranjan, Senior Al/Research Architect, Bosch (IT 7) (VR1) Dr. Kumar Vijay Mishra, Distinguished Lecturer, IEEE AESS, University of Maryland, USA (IT 8) (VR2) Prof. Debabrata Das, Director, IIIT Bangalore (IT 9)	ng Session	TS 81 (AI & ML) (8) TS 82 (AI & ML) (8) TS 83 (Rest SS)
(7) TS 44 (VLSI) (7) TS 45 (PE PS) (7)	(8) TS 54 (VLSI) (8) TS 55 (SS4) (8)	Tea Break	Prof. Shuvra S. Bhattacharya, IEEE Fellow, University of Maryland, USA (K3) (LA II – (VR6)	(4) TS 64 (Sensors) (4) TS 65 (Robotics) (4)	Conference Lu	(7) TS 74 (IoT) (7) TS 75 (Sensors) (7)	(VR3) Prof. Ujjwal Maulik, IEEE Fellow, Jadavpur University (IT 10) (VR4) Prof. David Matolak, IEEE Fellow, University of South Carolina, USA (IT 11) (VR5)	High Tea & Networking Session	(8) TS 84 (NW) (8) TS 85 (Signals) (8)
TS 46 (Mix) (7)	TS 56 (Signals) (8)			XXX		TS 76 (Neuromor phic) (6)	Mr. Nikhil Mitaliya, GM, Tabor Electronics Ltd. (IT 12) (VR6)		TS 86 (Optical) (8)

TS: Technical Session; K: Keynote; IT: Invited Talk

Cultural Program: 7.15 – 8.00 pm (Community Centre, NIT Rourkela)

Gala Dinner: 8 pm onwards (Community Centre, NIT Rourkela)

Please check for the Venue details on the following page.

Technical Session Schedule details (Day 2)

Day/ Date	Time	Session Number	Venue	VR Code	Assigned PIDs
	8.00 am –	Technical Session 41: (AI & ML) (7)	LAII-002	VR1	1898, 1925, 1942, 1943, 1986, 2000, 2025
	9.45 am	Technical Session 42: (AI & ML) (7)	LAII-006	VR2	2075, 2093, 2095, 2098, 2119, 2135, 2163
		Technical Session 43: (EV) (7)	LAII-009	VR3	2760, 3112, 3166, 3274, 3297, 3314, 3374
		Technical Session 44: (VLSI) (7)	LAII-012	VR4	2467, 2480, 2505, 2543, 2562, 2573, 2576
		Technical Session 45: (PE PS) (7)	LAII-104	VR5	2005, 2034, 2257, 2448, 2462, 2489, 2615
		Technical Session 46: (Mix) (7)	LAII-118	VR6	1932, 2822, 3305, 3307, 3602, 3613, 3748
	9.45 am –	Technical Session 51: (AI & ML) (8)	LAII-002	VR1	2165, 2241, 2304, 2336, 2340, 2346, 2449, 2454
	11.30 am	Technical Session 52: (AI & ML) (8)	LAII-006	VR2	2457, 2474, 2485, 2600, 2610, 2660, 2681, 2706
		Technical Session 53: (PE PS) (8)	LAII-009	VR3	2645, 2690, 2730, 2845, 2876, 2902, 3264, 3293
		Technical Session 54: (VLSI) (8)	LAII-012	VR4	2598, 2599, 2622, 2661, 2701, 2911, 3157, 3290
		Technical Session 55: (SS4) (8)	LAII-104	VR5	2895, 3056, 3142, 3152, 3287, 3343, 3364, 3450
		Technical Session 56: (Signals) (8)	LAII-118	VR6	2026, 2113, 2122, 2445, 2475, 2492, 2519, 2521
2					
Day 2 (22.08.2025)	12.30 pm –	Technical Session 61: (AI & ML) (4)	LAII-002	VR1	2722, 2790, 2794, 2795
8.3	1.30 pm	Technical Session 62: (AI & ML) (4)	LAII-006	VR2	2797, 2828, 2838, 2840
22.(Technical Session 63: (EV) (4)	LAII-009	VR3	2580, 3558, 3658, 3716
2 (3		Technical Session 64: (Sensors) (4)	LAII-012	VR4	1754, 2015, 2181, 2272
Эау		Technical Session 65: (Robotics) (4)	LAII-104	VR5	1562, 1746, 2479, 2507
	2.30 pm –	Technical Session 71: (AI & ML) (7)	LAII-002	VR1	2844, 2867, 2870, 2873, 2874, 2881, 2887
	4.15 pm	Technical Session 72: (AI & ML) (7)	LAII-006	VR2	2928, 2956, 2968, 2980, 2991, 3025, 3046
		Technical Session 73: (NW) (7)	LAII-009	VR3	1521, 1824, 1846, 2003, 2009, 2318, 2365
		Technical Session 74: (IoT) (7)	LAII-012	VR4	2523, 2612, 2724, 2750, 2969, 3161, 3253
		Technical Session 75: (Sensors) (7)	LAII-104	VR5	2640, 2677, 2743, 2820, 2834, 2860, 2893
		Technical Session 76: (Neuromorphic) (7)	LAII-118	VR6	1097, 1166, 1493, 2042, 2298, 2633, 2954
	5.15 pm –	Technical Session 81: (AI & ML) (8)	LAII-009	VR1	3078, 3093, 3103, 3134, 3150, 3159, 3160, 3164
	7.00 pm	Technical Session 82: (AI & ML) (8)	LAII-012	VR2	3172, 3173, 3273, 3304, 3319, 3324, 3339, 3404
		Technical Session 83: (Rest SS) (8)	LAII-109	VR3	1989, 2339, 2850, 3382, 2671, 1662, 2632, 3461
		Technical Session 84: (NW) (8)	LAII-114	VR4	2470, 2557, 2570, 2692, 2700, 2878, 2884, 2987
		Technical Session 85: (Signals) (8)	LAII-201	VR5	2574, 2683, 2696, 2704, 2719, 2775, 2836, 2938
		Technical Session 86: (Optical) (8)	LAII-222	VR6	1401, 2229, 2312, <mark>2361</mark> , 2500, 2597, 2705, 2847

Abstract of Day 3 (23.08.2025)

8.00 am –	9.45 am – 10.15 am	10.15 am –	11.30 am –	11.45 am –	12.30 pm –	1.30 pm –	2.30 pm –	4.00 pm –
9.45 am		11.30 am	11.45 am	12.30 pm	1.30 pm	2.30 pm	4.00 pm	5.00 pm
TS 91	Dr. Kapil Bhattad,	TS 101			TS 111		TS 121	
(AI & ML)	Sr. Director, Engineering,	(AI & ML)			(AI & ML)		(AI & ML)	
(7)	Qualcomm India (IT 13)	(5)			(4)		(5)	
	(VR1)			(
TS 92	Dr. I. Balakrishna,	TS 102		/R6	TS 112		TS 122	(9
(AI & ML)	Joint Director/ Scientist,	(VLSI)		2	(NexGen)		(VLSI)	V.
(7)	MeitY, GoI (IT 14) (VR2)	(5)		Bandyopadhyay, i (K4) (LA II – 118) (VR6)	(4)		(5)	118) (VR6)
TS 93	Dr. S. V. Kulkarni,	TS 103		ا 🚉	TS 113		TS 123	113
(PE PS)	IEEE Fellow, IIT Bombay	(NW)		pac A II	(Robotics)	-	(NW)	PM)
(7)	(IT 15) (VR3)	(5)	L.	lyo (L)	(4)	Lunch	(5)	<mark>(4 – 5 PIV</mark> II) (LA II -
TS 94	Dr. Ganapati Panda,	TS 104	Tea Break	anc K4)	TS 114	e Li	TS 124	(4 – (I) (II
(Sensors)	Research Advisor, CGU,	(Signals)	Br	a Bi	(Neuromorphic	ou:	(NexGen)	
(7)	Bhubaneswar (IT 16)	(5)	ea	itra kat)	ere	(5)) ;
	(VR4)		_	Dr. Sanghamitra Bandyopac IEEE Fellow, ISI, Kolkata (K4) (LA II	(4)	Conference		Valedictory (Lecture Annex II – LA
TS 95	Dr. Lalit Singh,	TS 105		ngh ISI,	XXX	Ö	WIE Session	/alc
(NexGen)	Senior Scientist & Head,	(IoT)		Sai W, I			(LA II)	Ar .
(Others)	AI appl., NPCIL-BARC,	(5)		Dr.			(LA II – 118)	ure
(7)	DAE, Gol Mumbai			I Fe			(VR5)	ect
	(IT 17) (VR5)			EEE				1
TS 96	Dr. D P Acharya,	TS 106		=	Dr. B. Majhi,		XXX	
(Optical)	Professor, NIT Rourkela	(Robotics)			VC, CGU,			
(7)	(IT18) (VR6)	(5)			Bhubaneswar			
					(IT 19) (VR6)			

TS: Technical Session; K: Keynote; IT: Invited Talk, VR: Virtual Room

Please check for the Venue details on the following page.

Technical Session Schedule details (Day 3)

Day/ Date	Time	Session Number	Venue	VR Code	Assigned PIDs			
	8.00 am –	Technical Session 91: (AI & ML) (7)	LAII-002	VR1	3444, 3479, 3502, 3507, 3527, 3529, 3761			
	9.45 am	Technical Session 92: (AI & ML) (7)	LAII-006	VR2	3555, 3559, 3564, 3573, 3587, 3592, 3606			
		Technical Session 93: (PE PS) (7)	LAII-009	VR3	3338, 3553, 3575, 3612, 3623, 3682, 3703			
		Technical Session 94: (Sensors) (7)	LAII-012	VR4	2922, 2929, 3067, 3323, 3431, 3604, 3767			
		Technical Session 95: (NexGen) (Others) (7)	LAII-104	VR5	84, 2394, 2527, 2716, 2754, 2766, 2815			
		Technical Session 96: (Optical) (7)	LAII-118	VR6	3102, 3143, 3509, 3574, 3584, 3616, 3646			
	10.15 am	Technical Session 101: (AI & ML) (5)	LAII-002	VR1	3628, 3631, 3634, 3665, 3697			
160	_	Technical Session 102: (VLSI) (5)	LAII-006	VR2	3350, 3458, 3560, 3568, 3693			
025	11.30 am	Technical Session 103: (NW) (5)	LAII-009	VR3	3004, 3418, 3419, 3455, 3463			
8.7		Technical Session 104: (Signals) (5)	LAII-012	VR4	3018, 3588, 3605, 3664, 3712			
3.0		Technical Session 105: (IoT) (6)	LAII-104	VR5	767, 3436, 3443, 3501, 3624, 3707			
3 (2		Technical Session 106: (Robotics) (5)	LAII-118	VR6	3387, 3470, 3619, 3636, 3669			
Day 3 (23.08.2025)								
	12.30 pm	Technical Session 111: (AI & ML) (4)	LAII-002	VR1	1727 , 3706, 3710, 3711, 3714			
	_	Technical Session 112: (NexGen) (4)	LAII-006	VR2	1043 , 2855, 3020, 3116, 3169			
	1.30 pm	Technical Session 113: (Robotics) (4)	LAII-009	VR3	3681, 3698, 3738, 3758			
		Technical Session 114: (Neuromorphic) (4)	LAII-012	VR4	3590, 3673, 3674, 3705			
	2.30 pm –	Technical Session 121: (AI & ML) (5)	LAII-002	VR1	3464 , 3731, 3740, 3754, 3765			
	4.00 pm	Technical Session 122: (VLSI) (5)	LAII-006	VR2	3709, 3715, 3719, 3764, 3766			
		Technical Session 123: (NW) (5)	LAII-009	VR3	1177 , 3549, 3648, 3756, 3768			
		Technical Session 124: (NexGen) (5)	LAII-012	VR4	3524, 3684, 3722, 3763, 3770			

Virtual Room Details

Virtual Room (VR) Code	Virtual Room (VR) Details	Meeting Link	ID & Passcode
VR1	VR1_INDISCON 25	VR1_INDISCON 25 Meeting-Join Microsoft Teams	Join the meeting now Meeting ID: 495 411 492 220 1 Passcode: KS2uA723
VR2	VR2_INDISCON 25	VR2_INDISCON 25 Meeting-Join Microsoft Teams	Join the meeting now Meeting ID: 484 289 300 869 Passcode: A8Fp3NR9
VR3	VR3_INDISCON 25	VR3_INDISCON 25 Meeting-Join Microsoft Teams	Join the meeting now Meeting ID: 428 141 161 785 0 Passcode: jc2jg6nY
VR4	VR4_INDISCON 25	VR4_INDISCON 25 Meeting-Join Microsoft Teams	Join the meeting now Meeting ID: 474 461 543 139 9 Passcode: pc9AG3Rn
VR5	VR5_INDISCON 25	VR5_INDISCON 25 Meeting-Join Microsoft Teams	Join the meeting now Meeting ID: 468 202 193 306 Passcode: Jw3Us27q
VR6	VR6_INDISCON 25	VR6_INDISCON 25 Meeting-Join Microsoft Teams	Join the meeting now Meeting ID: 423 862 013 867 6 Passcode: DB9Ue9X5

Keynote/Invited Talk Details

Date/ Time	Name of the	Title of the Talk	Venue #	VR Details
	Speaker			
		Day 1: 21.08.2025 (Thursday)		
21.08.2025	Dr. Ashutosh Dutta	5G/6G Security and AI/ML – Opportunities and	TIIR	<u>Live</u>
11.00 – 11.45 am		Challenges	Building	<u>Streaming</u>
21.08.2025	Prof. Sajal K. Das	From Smart Sensing to Smart Living: The Era of IoT,	TIIR	<u>Live</u>
11.45 am – 12.30 pm		AI/ML and Data Science	Building	<u>Streaming</u>
21.08.2025	Prof. Josep M.	Terahertz Communications and Sensing: From the	LAII - 002	VR 1
4.15 – 4.45 pm	Jornet	Near Field to Space Networks		
21.08.2025	Prof. B. D. Subudhi	Multi-agent Distributed Control of Microgrid	LAII – 006	VR 2
4.15 – 4.45 pm				
21.08.2025	Dr. Amit Mishra	Bio-inspired Methods for Sensing & Instrumentation	LAII – 009	VR 3
4.15 – 4.45 pm		using Al		
21.08.2025	Prof. S. K. Patra	Intelligent Airwaves: Machine and Deep Learning	LAII – 012	VR 4
4.15 – 4.45 pm		Paradigms for Next-Generation Wireless Networks		
21.08.2025	Dr. Tushar Vrind	Aerial Edge Intelligence: Algorithms, Protocols, and	LAII – 104	VR 5
4.15 – 4.45 pm		Deployment Strategies for 6G Non-Terrestrial		
		Networks		
21.08.2025	Prof. Sudip Mishra	All Things Connected: The Age of Intelligent Networks	LAII - 118	VR 6
4.15 – 4.45 pm				
		Day 2: 22.08.2025 (Friday)		
22.08.2025	Prof. Shuvra S.		LAII - 118	VR 6
11.45 am – 12.30 pm	Bhattacharya			
21.08.2025	Dr. Alok Ranjan	Edge Artificial Intelligence for Connected, Cooperative	LAII - 002	VR 1
4.15 – 4.45 pm		& Automated Mobility		
21.08.2025	Dr. Kumar Vijay	Signal Processing for Integrated Sensing and	LAII – 006	VR 2
4.15 – 4.45 pm	Mishra	Communications		
21.08.2025	Prof. Debabrata Das	Resource Scheduling in Network Slicing of 5G-Advance	LAII – 009	VR 3
4.15 – 4.45 pm		and 6G		
21.08.2025	Prof. Ujjwal Maulik	Machine Learning for Healthcare	LAII - 012	VR 4
4.15 – 4.45 pm				

21.08.2025	Prof. David Matolak	Reliable Future Aviation Communications	LAII – 104	VR 5
4.15 – 4.45 pm				
21.08.2025	Mr. Nikhil Mitaliya	Superconducting Quantum Computing Hardware	LAII - 118	VR 6
4.15 – 4.45 pm				
		Day 3: 23.08.2025 (Saturday)		
23.08.2025	Dr. Kapil Bhattad	Role of sensing in next-generation wireless networks	LAII - 002	VR 1
9.45 – 10.15 am				
23.08.2025	Dr. I. Balakrishna	Innovative Antenna Solutions for Next-Generation	LAII – 006	VR 2
9.45 – 10.15 am		Technologies: Driving Smart and Sustainable Societal		
		Advancements		
23.08.2025	Dr. S. V. Kulkarni	Magnetics and Insulation Design for Power Electronics	LAII – 009	VR 3
9.45 – 10.15 am				
23.08.2025	Dr. Ganapati Panda	Application of ML and DL Techniques to Healthcare	LAII – 012	VR 4
9.45 – 10.15 am				
23.08.2025	Dr. Lalit Singh	Artificial Intelligence (AI) in the operation and	LAII – 104	VR 5
9.45 – 10.15 am		management of Nuclear Power Plants		
23.08.2025	Dr. D P Acharya	Chip and Artificial Intelligence: A Symbiosis	LAII - 118	VR 6
9.45 – 10.15 am				
23.08.2025	Dr. Sanghamitra		LAII – 118	VR 6
11.45 am – 12.30 pm	Bandyopadhyay			
23.08.2025	Dr. B. Majhi	Al Applications to Medical Imaging	LAII – 118	VR 6
12.30 – 1.00 pm				