

Annual Modeling and Simulation Conference (ANNSIM'26)

Monday, 4th May		ANNSIM'26 Sessions			
Session Block	Time	Parallel Session I (Classroom 110)	Parallel Session II (Classroom 111)	Parallel Session II (Classroom 117)	Parallel Session III (Classroom 119)
	8:00-9:00	Morning Coffee / Breakfast			
	9:00-10:30	Welcome and Plenary Session with Keynote (HEC-125, Auditorium Classroom)			
	10:30-11:00	Coffee Break			
Session Block 1	11:00-12:30	CNS I (1 paper, 1 Keynote) Abdolreza Abhari Cheng Bang Chen	ANSS I (3 papers) Deniz Cetinkaya Shao Wei Sean Lam Ashish Kumar	MSCS (2 papers) Danda Rawat David Mohaisen	SimAUD I (3 papers) Dilshan Ossen Soheil Sabri
	12:30-13:30	Lunch			
Session Block 2	13:30-15:00	CNS II (3 papers) Abdolreza Abhari Cheng Bang Chen	MLAIS I (3 papers) Sean Mondesire Bulent Soykan	Tutorial I (1 Tutorial) Scott Rosen Gulsah Koksalmis	CPS/DT (3 papers) Joost Mertens Mamadou Kaba Traore
	15:00-15:30	Coffee Break			
Session Block 3	15:30-17:00	CNS III (3 papers) Abdolreza Abhari Cheng Bang Chen	SET (2 papers) Roger Azevedo Omar Ashour	Tutorial II (1 Tutorial) Scott Rosen Gulsah Koksalmis	TMS I (3 papers) Gabriel Wainer Paolo Bocciarelli
	17:00-19:00	Conference Reception			

Tuesday, 5th May		ANNSIM'26 Sessions			
Session Block	Time	Parallel Session I (Classroom 110)	Parallel Session II (Classroom 111)	Parallel Session II (Classroom 117)	Parallel Session III (Classroom 119)
	8:00-9:00	Morning Coffee / Breakfast			
	9:00-10:30	Plenary Session with Keynote and Awards (HEC-125, Auditorium Classroom)			
	10:30-11:00	Coffee Break			
Session Block 4	11:00-12:30	MSLSCT I (3 papers) Bulent Soykan Adan Vela	ANSS II (3 papers) Deniz Cetinkaya Shao Wei Sean Lam Ashish Kumar	MSM I (3 papers) Michel Audette Jerzy Rozenblit	SimAUD II (3 papers) Dilshan Ossen Soheil Sabri
	12:30-13:30	Lunch			
Session Block 5	13:30-15:00	Tutorial III (1 Tutorial) Scott Rosen Gulsah Koksalmis	MLAIS II (3 papers) Sean Mondesire Bulent Soykan	MSM II (3 papers) Michel Audette Jerzy Rozenblit	TMS II (3 papers) Gabriel Wainer Paolo Bocciarelli
	15:00-15:30	Coffee Break			

Session Block 6	15:30-17:00	MSLSCT II (3 papers) Bulent Soykan Adan Vela	MLAIS III (2 papers) Sean Mondesire Bulent Soykan	Tutorial IV (1 Tutorial) Scott Rosen Gulsah Koksalmis	TMS III (1 paper, 1 tutorial) Gabriel Wainer Paolo Bocciarelli
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Wednesday, 6th May		ANNSIM'26 Sessions			
Session Block	Time	Parallel Session I (Classroom 110)	Parallel Session II (Classroom 111)	Parallel Session II (Classroom 117)	Parallel Session III (Classroom 119)
	8:00-9:00	Morning Coffee / Breakfast			
Session Block 7	9:00-10:30	WIP I (3 papers) Vishnu Prabhu	ANSS III (3 papers) Deniz Cetinkaya Shao Wei Sean Lam Ashish Kumar	MSM III (3 papers) Michel Audette Jerzy Rozenblit	HACAS (1 paper, 1 Keynote) Charles Macal Xiaolin Hu
	10:30-11:00	Coffee Break			
Session Block 8	11:00-12:30	WIP II (3 papers) Vishnu Prabhu	ANSS IV (2 papers) Deniz Cetinkaya Shao Wei Sean Lam Ashish Kumar	MSM IV (3 papers) Michel Audette Jerzy Rozenblit	SimAUD III (1 paper) Dilshan Ossen Soheil Sabri
	12:30-13:30	Lunch			
Session Block 9	13:30-15:00	MSLSCT III (3 papers) Bulent Soykan Adan Vela	PhD Colloquium I (4 papers) Cristina Ruiz-Martin Mansoor Mollaghasemi	S&SES I (3 papers) Dominique Blouin Veeraraghava Raju Hasti	VR/MR/XR I (3 papers) Jalal Possik Dirk Reiners
	15:00-15:30	Coffee Break			
Session Block 10	15:30-17:00	MSLSCT IV (2 papers) Bulent Soykan Adan Vela	PhD Colloquium II (4 papers) Cristina Ruiz-Martin Mansoor Mollaghasemi	S&SES II (3 papers) Dominique Blouin Veeraraghava Raju Hasti	VR/MR/XR II (1 paper) Jalal Possik Dirk Reiners

Thursday, 7th May		ANNSIM'26 Sessions			
Session Block	Time	Parallel Session I (Classroom 110)	Parallel Session II (Classroom 111)	Parallel Session II (Classroom 117)	Parallel Session III (Classroom 119)
	8:00-9:00	Morning Coffee / Breakfast			
Session Block 11	9:00-10:30	SIMULATION meeting		NASA Event	
	10:30-11:00	Coffee Break			
Session Block 12	11:00-12:30			NASA Event	
	12:30-13:00	Conference Closure			

ANNSIM 2026 (Schedule - ANSS)

Monday, 4th May		Annual Simulation Symposium (ANSS) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 1 Classroom 111	11:00-12:30	Chair TBD	9	ASSESSING EMERGENT BEHAVIOR USING ENTROPY IN AGENT-BASED MODELING AND SIMULATION OF AUTONOMOUS SYSTEMS	Arsenio Gumahad and Andrew J. Collins	
			20	A DUAL-GRAPH SIMULATION TESTBED FOR AUTONOMOUS SWARMS OF OTHER-WORLD LANDERS	Don Berndt	
			30	DEVFORGE: A VISUAL MODELING ENVIRONMENT FOR XDEVS	Luis Fernando Almendras Aruzamen, Daniel Muniz, Jose L. Risco-Martin, Patricia Arroba and Roman Cardenas	

Tuesday, 5th May		Annual Simulation Symposium (ANSS) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 4 Classroom 111	11:00-12:30	Chair TBD	42	SIMULATION-BASED SAFETY SCREENING OF REINFORCEMENT LEARNING ENABLED DRIVING CONTROLLERS USING LOW-FIDELITY MODELS	Suvrat Jain, Karnidh Arora, Jason A. Tanuwijaya, Aryan Mukherjee, Dev Sharma, Batuhan Akbas and Mustafa Ilhan Akbas	
			46	USING HIGH-FIDELITY HUMAN BODY SIMULATION MODELS TO CREATE SURROGATES FOR TRUSTED AUTONOMOUS CASUALTY EVACUATION	Nichole Davis, Timothy Bentley and Andreas Tolk	
			62	BEYOND CORRIDOR AVERAGES: LANE-LEVEL VALIDATION OF MICROSCOPIC FREEWAY SIMULATION WITH DATA-DRIVEN ARRIVALS	Korede R. Bishi, Casey Bowman and John A. Miller	

Wednesday, 6th May		Annual Simulation Symposium (ANSS) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 7 Classroom 111	9:00-10:30	Chair TBD	76	MODELING MISINFORMATION AS A COMMON PROBLEM	Vrinda Malhotra	
			77	SCALABLE VALIDATION OF AUTONOMOUS COLLISION AVOIDANCE VIA TWO-TIER SIMULATION	Jose A. Gonzalez Nunez and Mustafa Ilhan Akbas	

Classroom 111			109	MODELING THE IMPACT OF TRANSPORT POLICIES ON OUT OF HOSPITAL CARDIAC ARREST SURVIVAL: A DISCRETE EVENTS SIMULATION APPROACH	Shao Wei Sean Lam, HONG MING TAN, Ashish Kumar, ANNA FANGFEI YING, XINGJING CHEN, EERON LOW, Mohamed Amirul and MARCUS ENG HOCK ONG		
	10:30-11:00	Coffee Break					
Session Block 8 Classroom 111	11:00-12:30	Chair TBD	114	ENSEMBLE KALMAN FILTER-BASED DATA ASSIMILATION FOR WILDFIRE SPREAD SIMULATION	Antonio G. Imbesi and Xiaolin Hu		
			121	SMART PRODUCT SERVICE SYSTEM: ENHANCING PROCESS VALUE MODELS THROUGH INCREMENTAL BPMN-TO-DEVS TRANSFORMATION	Thecle Alix, Greg Zacharewicz and Nicolas Daclin		

ANNSIM 2026 (Schedule - CNS)

Monday, 4th May		Communication technologies and Networking Simulation (CNS) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 1 Classroom 110	11:00-12:30	Abdolreza Abhari		KEYNOTE: DISTRIBUTED SIMULATION	Anastasia Anagnostou	
			2	MACHINE LEARNING MODELS FOR VIDEO STREAMING QUALITY OF EXPERIENCE PREDICTION FROM WIRELESS TRANSMISSION PARAMETERS	Ala'a Al-Habashna, Amjad Iqbal and Gabriel Wainer	
	12:30-13:30	Kick Off Lunch				
Session Block 2 Classroom 110	13:30-15:00	Abdolreza Abhari	80	BEYOND VIBE CODING: ATEAM, A GOVERNANCE-AWARE FRAMEWORK AND BENCHMARK FOR LLM-DRIVEN SOFTWARE EVOLUTION	Salvatore Vella, Salah Sharieh and Alex Ferworn	
			106	CRYPTOGRAPHIC AUTHENTICATION FOR UAV SWARM SECURITY: A COMPARATIVE ANALYSIS OF DETECTION METHODS AGAINST SPOOFING ATTACKS	SANG Xing, Jessica Sammons, Laxima Niure Kandel, Siyao Li and Thomas Yang	
			93	KAN CONTROLS FOR DRIFT-ROBUST CONTINUAL INTRUSION DETECTION	Evgenii Ostanin, Nebojsa Djasic, Salah Sharieh and Alexander Ferworn	
	15:00-15:30	Coffee Break				
Session Block 3 Classroom 110	15:30-17:00	Abdolreza Abhari	112	MODELLING AND PERFORMANCE EVALUATION OF SATELLITE ENABLED 5G/6G MULTICAST OVER TNAN	Rajendra Paudyal, Steve McRea, Rajendra Upadhyay, AL Nahian Bin Emran, Lisa Donnan and Duminda Wijesekera	
			89	COMMUNICATION TRAFFIC REDUCTION IN EDGE-ENABLED DISTRIBUTED DEEP LEARNING USING PEER-TO-PEER COORDINATION	Jorge A. Lopez and Abdolreza Abhari	
			94	CONTROLLABLE TIME-SERIES GENERATION FOR SMART-CITY DIGITAL TWINS VIA STRUCTURED TIMEGAN	Wael Shabana and Abdolreza Abhari	

ANNSIM 2026 (Schedule - CPS/DT)

Monday, 4th May		Cyber-Physical Systems and Digital Twins (CPS/DT) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 2 Classroom 119	13:30-15:00	Chair TBD	18	DIGITAL TWIN-DRIVEN OPTIMIZATION OF HUMANITARIAN LOGISTICS USING DYNAMIC VEHICLE-DRONE ROUTING	Ahmad Bany Abdelnabi and Ghaith Rabadi	
			84	ARCHITECTURE-BASED GENERATION OF SIMULATION MODELS FOR IOT TWINS	Zenan Zha, Protik Mukherjee and Sadaf Mustafiz	
			111	VISUALIZING ZERO-EMISSIONS APPROACHES: MULTI-MODAL FREIGHT TRANSPORT TO PROVIDE DECISION ASSURANCE	Daniel John Mitchell, Andrew Goodsell, Nishatabbas Rehmatulla and David Flynn	

ANNSIM 2026 (Schedule - HACAS)

Wednesday, 6th May		Human Agents and Cooperative Artificial Societies (HACAS) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 7 Classroom 119	9:00-10:30	Chair TBD	95	AN AGENT-BASED MODEL OF EXPECTATIONS STATES THEORY IN A WELL-MIXED POPULATION	Mahsa Nouri Zonouz	
				Keynote		

ANNSIM 2026 (Schedule - VR/MR/XR)

Wednesday, 6th May		Immersive Technologies for Modeling and Simulation (VR/MR/XR) Presentations				
Session Block 9 Classroom 119	13:30-15:00	Chair TBD	36	A CROSS-REALITY, SPATIAL-AUDIO TESTBED: DEVELOPMENT AND APPLICATIONS FOR SIMULATIONS	Giancarlo M. Luna, Crystal Maraj, Kevin Fernandez, Jonathan Hurter, Ianelys baezmoreno and Charles amburn	
			69	A DATA-DRIVEN DIGITAL TWIN ARCHITECTURE FOR ELECTRIC ARC FURNACES USING LSTM-BASED REDUCED-ORDER MODELS AND DISTRIBUTED SIMULATION	Michel El Haddad, Jalal Possik and Charles Yaacoub	
			71	EXPLORING EXTENDED REALITY USE CASES FOR VISUALISING ROAD FREIGHT DECARBONISATION USING DIGITAL TWINS	Andrew Goodsell	
	15:00-15:30	Coffee Break				
Session Block 10 Classroom 119	15:30-17:00	Chair TBD	87	XR-NATIVE DIGITAL TWIN FOR SUBTRACTIVE MANUFACTURING MONITORING WITH AI-ENABLED HUMAN-IN-THE-LOOP ASSISTANCE	Janaki Panneerselvam, Konstantinos Mykoniatis and Minas Pantelidakis	
				Keynote		

ANNSIM 2026 (Schedule - MLAIS)

Monday, 4th May		Machine Learning and AI in Simulation (MLAIS) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 2 Classroom 111	13:30-15:00	Chair TBD	15	DEVELOPING A DISCRETE-EVENT SIMULATOR OF SCHOOL SHOOTER BEHAVIOR FROM VR DATA	Christopher A. McClurg and Alan R. Wagner	
			23	DECENTRALIZED ROW ALLOCATION FOR HARVESTING ROBOTS WITH UNCERTAIN HARVESTING SPEEDS IN AN ACTOR-CRITIC STRUCTURE	Murtadha Alsayegh and Yunjun xu	
			25	AN AGENTIC RAG SYSTEM FOR MULTI-COURSE SUPPORT IN MODELING AND SIMULATION EDUCATION	Yiyang Li, Yuzhong Shen, Masha Sosonkina and James Leathrum	

Tuesday, 5th May		Machine Learning and AI in Simulation (MLAIS) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 5 Classroom 111	13:30-15:00	Chair TBD	44	CONTINUAL LEARNING WITH ROLLING-WINDOW RESAMPLING FOR ONLINE SIMULATION SYSTEMS	Tori L. Wright, Amy Seo, Bulent Soykan and Sean Mondesire	
			48	MULTI-OBJECTIVE REWARD SHAPING FOR AUTONOMOUS GROUND VEHICLE CONTROL IN ADVERSARIAL SIMULATIONS	Bulent Soykan, Ghaith Rabadi, Grace Bochenek and Victor J. Paul	
			55	COMBATENV: A GYMNASIUM-COMPLIANT SIMULATION FRAMEWORK FOR ADVERSARIAL STRESS-TESTING OF AUTONOMOUS CONTROL LOGIC	Bulent Soykan, Ghaith Rabadi and Grace Bochenek	
	15:00-15:30	Coffee Break				
Session Block 6 Classroom 111	15:30-17:00	Chair TBD	56	SCENARIO VISUALIZATION TOOLKIT: PROVIDING EXPLANATIONS AND INTERPRETATIONS FOR SIMULATION TEST DATA	Quentin A. Goss and Mustafa Ilhan Akbas	
			90	BASAL STABILITY IN LEARNING SYSTEMS: A GRADIENT-BASED DIAGNOSTIC FOR RELIABILITY UNDER DISTRIBUTION SHIFT	Mayra A. Bornacelly Castaneda and Diego Andre Guevara Rabanal	



ANNSIM 2026 (Schedule - MSLSCT)

Tuesday, 5th May		Modeling and Simulation for Logistics, Supply Chain & Transportation (MSLSCT) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 4 Classroom 110	11:00-12:30	Chair TBD	24	REINFORCEMENT LEARNING FOR FACILITY LAYOUT PLANNING WITH SIMULATION-BASED PERFORMANCE ASSESSMENT	Stefan Galka and Jan Schneidewind	
			31	GRAPH-BASED TRAVEL-TIME MODELING FOR HOSPITAL TRANSPORT SIMULATION	Ebrahim Ehsanfar	
			52	EVALUATING SYSTEM DESIGN DECISIONS OF AUTONOMOUS TRANSPORTATION SYSTEMS IN HOSPITAL LOGISTICS USING AGENT-BASED SIMULATION	Anna Hess and Dominik Stampa	
	12:30-13:30	Lunch				
	15:00-15:30	Coffee Break				
Session Block 6 Classroom 110	15:30-17:00	Chair TBD	65	PREDICTIVE DIGITAL TWIN FOR EMERGENCY EVACUATION: BAYESIAN STATE ESTIMATION AND CLOSED-LOOP CONTROL UNDER UNCERTAINTY	Bulent Soykan and Ghaith Rabadi	
			66	DIFFERENTIABLE AGENT-BASED MODELING FOR MULTI-ECHELON SUPPLY CHAINS: GRADIENT-BASED OPTIMIZATION OF HETEROGENEOUS POLICIES AT SCALE	Bulent Soykan, Murtadha Alsayegh, Sean Mondesire and Ghaith Rabadi	
			82	ROBUST VERTIPOINT CANDIDATE GENERATION UNDER DEMAND UNCERTAINTY USING IVAT-GUIDED FUZZY CLUSTERING	Hossein Zamani Saghadzadeh, Saber Esmaili Ghayoumabadi and Soheil Sabri	

Wednesday, 6th May		Modeling and Simulation for Logistics, Supply Chain & Transportation (MSLSCT) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 9 Classroom 110	13:30-15:00	Chair TBD	83	GEOMETRIC TRAJECTORY OPTIMIZATION FOR TRACON ARRIVALS: AN NLP APPROACH WITH ATC VECTORING MANEUVER MODELING	Yutian Pang, Daniel Delahaye and John-Paul Clarke	0
			98	INFRASTRUCTURE MODERATION OF CROWDSOURCING EFFECTIVENESS IN HYBRID LAST-MILE DELIVERY SYSTEMS	Mohammad Baniabdelnabi, Ahmad Bany Abdelnabi and Ghaith Rabadi	0
			100	AN OPTIMIZATION-DRIVEN SIMULATION FRAMEWORK FOR DRONE-ASSISTED BLOOD DELIVERY IN HEALTHCARE LOGISTICS	Mohammad Baniabdelnabi, Ahmad Bany Abdelnabi and Ghaith Rabadi	0
	15:00-15:30	Coffee Break				

Session Block 10 Classroom 110	15:30-17:00	Chair TBD	105	SIMULATION-BASED DEEP REINFORCEMENT LEARNING FOR FIXED-ROUTE TRUCK-DRONE DISPATCH PROBLEM	Ahmad Bany Abdelnabi and Ghaith Rabadi	0
			107	A SIMULATION FRAMEWORK FOR ROCKET-ENABLED HUMANITARIAN AID DELIVERY	Marwen Elkamel, Charles Major, Carson Gray and Luis Rabelo	0

ANNSIM 2026 (Schedule - S&SES)

Wednesday, 6th May		Modeling and Simulation for Sustainability and Smart Energy Systems (S&SES) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 9 Classroom 117	13:30-15:00	Chair TBD	13	INCLUDING SOCIAL BEHAVIOR IN DEMAND FORECASTS CHANGES REGIONAL ELECTRICITY DEMAND ESTIMATES: INSIGHTS FROM AN AUSTRALIA CASE STUDY	Benjamin Hofmann, Rajith Vidanaarachchi and Marnie Shaw	
			102	EXPLAINABLE ANOMALY DETECTION IN COMPRESSOR SYSTEMS USING MULTIMODAL SENSOR FUSION AND AUTOMATED MACHINE LEARNING	Nagarjun, Nadia Aref, Guneet Bhatia, Ruta Deshpande, Jason Voelker and Veeraraghava Raju Hasti	
			104	ARTIFICIAL NEURAL NETWORK SURROGATE MODELING OF LAMINAR FLAME SPEED AND ADIABATIC FLAME TEMPERATURE FOR REAL-TIME DIGITAL TWIN APPLICATIONS	Penelope A. Torres Serrano, Glacier Ramkissoon and Veeraraghava Raju Hasti	
	15:00-15:30	Coffee Break				
Session Block 10 Classroom 117	15:30-17:00	Chair TBD	113	CLIMATE-AWARE MODELING FOR ENERGY-EFFICIENT DATA CENTER WORKLOAD ROUTING	Phani Raja Bharath Balijepalli and Veeraraghava Raju Hasti	
			118	A DIGITAL TWIN-INSPIRED SIMULATION FRAMEWORK FOR COMPUTER VISION-BASED TRANSFORMER OIL LEAK DETECTION	Hussen Premier, Jaydeep Naha and Veeraraghava Raju Hasti	
			119	SIMULATION DRIVEN SYNTHETIC DATA GENERATION FOR AI BASED CRACK DETECTION IN POWER TRANSFORMERS	Fazle Rahat, Jaydeep Naha and Veeraraghava Raju Hasti	

ANNSIM 2026 (Schedule - MSCS)

Monday, 4th May		Modeling and Simulation in Cyber Security (MSCS) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 1 Classroom 117	11:00-12:30	Chair TBD	16	ADVERSARIAL MIMICRY AND MASKING IN ISOLATION FOREST ANOMALY DETECTION SYSTEMS	Clarence Worrell and Kevin Kurian	
			60	TOWARDS REAL-TIME CYBER WARFARE SIMULATION: A HIGH-EFFICIENCY HEURISTIC FOR BUDGET-CONSTRAINED ATTACK INTERDICTION	Jeongkeun Shin, L. Richard Carley and Kathleen M. Carley	

ANNSIM 2026 (Schedule - MSM)

Tuesday, 5th May		Modeling and Simulation in Medicine (MSM) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 3 Classroom 117	9:00-10:30	Chair TBD	45	LLM-DRIVEN VIRTUAL PATIENT SIMULATION WITH DIALOGUE, PHYSICAL EXAM, AND COMPREHENSIVE INTERACTION LOGGING FOR CLINICAL TRAINING	Shalon Walter, Robert Delfs, Kyle McLemore, Maribeth Demer, Carson Keegan, David Biffar and Allan Hamilton	
			97	PRELIMINARY INVESTIGATION INTO THE ELECTRICAL IMPEDANCE OF A SIMPLIFIED MODEL OF A CHEMO-STRESSED CELLULAR MEMBRANE USING MOLECULAR DYNAMICS AND ELECTROCHEMICAL IMPEDANCE SPECTROSCOPY	Khalid Tantawi, Rayanne Alameddine, Dalal Alharthi, Allison Adams and Matthew Colson	
			99	MODELING EMERGENCY DEPARTMENT PHYSICIAN BURNOUT AND OPERATIONAL PERFORMANCE USING HYBRID SIMULATION	Siddharth Vipankumar Abrol Neena and Vishnunarayan Girishan Prabhu	
10:30-11:00		Coffee Break				
Session Block 4 Classroom 117	11:00-12:30	Chair TBD	38	AIMHEI: AN AI-POWERED SYSTEM FOR AUTOMATED ASSESSMENT OF CLINICAL INTERVIEW COMPETENCIES	Kyle McLemore, Robert Delfs, Ally Molzahn, Carson Keegan, David Biffar and Allan Hamilton	
			117	TOWARD INTEGRATED CLINICAL DECISION SUPPORT FOR ALZHEIMER'S DISEASE: NEUROIMAGING AND BIOFLUID BIOMARKER MODELING	Hesameddin Mostaghimi, Hamid R. Okhravi, Daniel A. Cohen, Bahar Niknejad and Michel Audette	
			97	PRELIMINARY INVESTIGATION INTO THE ELECTRICAL IMPEDANCE OF A SIMPLIFIED MODEL OF A CHEMO-STRESSED CELLULAR MEMBRANE USING MOLECULAR DYNAMICS AND ELECTROCHEMICAL IMPEDANCE SPECTROSCOPY	Khalid Tantawi, Rayanne Alameddine, Dalal Alharthi, Allison Adams and Matthew Colson	

Wednesday, 6th May		Modeling and Simulation in Medicine (MSM) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 7 Classroom 117	9:00-10:30	Chair TBD	21	EXPLAINABLE SIMULATION OF A SURGICAL TRAINING SYSTEM: A CAST-INSPIRED CASE STUDY	Amis Lektuers, Tyler Michael Wilson and Jerzy Rozenblit	
			37	LC-VSTP: LIDAR-CAMERA FUSED VIRTUAL SURGERY TRAINING PLATFORM	Jiahao Tang, Lihao Guo, Yang Nan, Tyler M. Wilson, Siyang Cao, Han Xu and Jerzy Rozenblit	
			40	REAL-TIME SUTURE QUALITY ASSESSMENT USING YOLOV8 FOR SURGICAL SKILLS TRAINING IN MEDICAL EDUCATION	Robert Delfs, Kyle McLemore, Shalon Walter, Maribeth Demer, Carson Keegan, David Biffar and Allan Hamilton	
10:30-11:00		Coffee Break				
Session Block 8 Classroom 117	11:00-12:30	Chair TBD	22	VIRTUAL REALITY TRAINING SIMULATOR FOR PERCUTANEOUS NEEDLE-BASED INTERVENTIONS WITH HAPTIC FEEDBACK	Noah P. Bertholon, Claire Martin, Erik Pernod and Hadrien Courtecuisse	
			53	A REAL-TIME HAPTICS-DRIVEN VIRTUAL REALITY-BASED BIOMECHANICS SIMULATION ARCHITECTURE FOR OBSTETRICS TRAINING	Mohammad Nazmus Saquib, Ahmad Ravangard, Austin Tapp, Oleksandr Kravchenko, Sebastian Nasrallah and Michel Audette	

			73	AN AGENT-BASED MODEL FOR EVALUATING SURGICAL SITE INFECTION PREVENTION BUNDLE POLICIES IN COLORECTAL SURGERY	Sayed Mohammad Sajjadi, Vishnunarayan Girishan Prabhu, Nidhi Rohatgi, Hany Takla and Robert Morgan	
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ANNSIM 2026 (Schedule - Phd)

Wednesday, 6th May		Ph.D. Colloquium Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 9 Classroom 111	13:30-15:00	Chair TBD	125	A DEVS-BASED CO-SIMULATION METHODOLOGY FOR IOT EARLY WARNING SYSTEMS	Daniel Muniz	
			127	PHYSIOLOGICALLY RESPONSIVE AI FOR DETECTING AND MANAGING DRIVER IMPAIRMENT STATES IN SEMI-AUTONOMOUS VEHICLES	Ancuta Margondai, Nicholas Battle, Jacob Raider, Julie Rader, Luis-Enrique Cordero and Mustapha Mouloua	
			130	THE MODELING OF SOCIAL INFLUENCE TO IMPROVE THE PERFORMANCE OF NETWORK FEEDERS DURING THE ENERGY TRANSITION	Benjamin Hofmann	
			133	SIMULATION FRAMEWORK FOR EVALUATING AUTONOMOUS MOBILE ROBOT SYSTEMS IN HOSPITAL ENVIRONMENTS	Anna Hess	
	15:00-15:30	Coffee Break				
Session Block 10 Classroom 111	15:30-17:00	Chair TBD	134	INTEGRATING PARTICLE FILTER AND ENSEMBLE KALMAN FILTER FOR DATA ASSIMILATION FOR DIGITAL TWIN APPLICATIONS	Antonio G. Imbesi	
			135	DATA-DRIVEN DECISION SUPPORT FOR INTERNAL HOSPITAL LOGISTICS UNDER UNCERTAINTY	Ebrahim Ehsanfar	
			136	TOWARD STRUCTURAL RELIABILITY IN LEARNING-ENABLED SYSTEMS: A GEOMETRIC PERSPECTIVE ON FAIRNESS UNDER DISTRIBUTION SHIFT	Mayra A. Bornacelly Castaneda	
			137	TOWARDS EFFICIENT AND SECURE GROUP COMMUNICATION IN CELLULAR MULTICAST AND BROADCAST SERVICES	Rajendra Paudyal	

ANNSIM 2026 (Schedule - SET)

Monday, 4th May		Simulation in Education and Training (SET) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 3 Classroom 111	15:30-17:00	Chair TBD	64	DIFFICULTY- AND COHORT-INFORMED PRIORS FOR INDIVIDUALIZED NEXT-EXERCISE PERFORMANCE PREDICTION IN AN INTELLIGENT TUTORING SYSTEM	Sean Mondesire and Bulent Soykan	
			74	MODELING INDIVIDUAL DIFFERENCES UNDERLYING HUMAN SCIENTIFIC REASONING PROCESSES IN GAME-BASED LEARNING ENVIRONMENTS	Cameron Eve Marano, Annamarie Brosnihan, Siddharth Vipankumar Abrol, Vishnunarayan Girishan Prabhu and Roger Azevedo	

ANNSIM 2026 (Schedule - SimAUD)

Monday, 4th May		Symposium on Simulation for Architecture and Urban Design (SimAUD) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 1 Classroom 119	11:00-12:30	Chair TBD	26	CHATGPT FOR BUILDING ENERGY COMPLIANCE: AN EVALUATION OF EARLY-STAGE SAP ASSESSMENT	Yu-Chen Lin, Marios Kordilas and Yair Schwartz	
			43	RULE-LEVEL REASONING FOR PERFORMANCE-AWARE FLOORPLAN GENERATION: INTEGRATING SHAPE GRAMMARS WITH DAYLIGHT SIMULATION	Yichao Shi, Athanassios Economou and Patrick Kastner	
			54	A COMPARATIVE STUDY ON THE ENERGY PERFORMANCE OF KINETIC FAÇADES UNDER VARIOUS CLIMATES	Chengde Wu and Chloe M. Timmerman	

Tuesday, 5th May		Symposium on Simulation for Architecture and Urban Design (SimAUD) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 4 Classroom 119	11:00-12:30	Chair TBD	59	SIMULATION-DRIVEN XGBOOST MODEL FOR MULTI-OUTPUT BUILDING FACADE PERFORMANCE PREDICTION	Emmanuel Imuetinyan Aghimien and Ajla Aksamija	
			68	ADAPTIVE FIRE EVACUATION SIMULATION FOR ARCHITECTURAL LAYOUT ASSESSMENT USING CURRICULUM TRAINED DEEP Q-NETWORKS	Gisung Han, Kyunghyun Cho, Yujeung Eum, Yoan Song, Andrew J. Park and Seung-Hyun Cha	
			81	VDA: A VARIANCE DECOMPOSITION ANALYSIS FOR PARAMETER SCREENING BY SEPARATING SIGNAL AND STOCHASTICITY IN SIMULATIONS	Kaidong Hu, Mubbasir Kapadia, vladimir pavlovic and Sejong Yoon	

Wednesday, 6th May		Symposium on Simulation for Architecture and Urban Design (SimAUD) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters

Session Block 8 Classroom 119	11:00-12:30	Chair TBD	122	OPTIMIZING BUILDING CODE COMPLIANCE CHECKING THROUGH SIMULATION AND LLMS	Nikoo Mirhossein, Davood Shojaei and Soheil Sabri	0

ANNSIM 2026 (Schedule - TMS)

Monday, 4th May		Theory and foundations for Modeling and Simulation (TMS) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 3 Classroom 119	15:30-17:00	Gabriel Wainer	33	EXTENDING XDEVS NO_STD: REAL-TIME ASYNCHRONOUS DEVS FOR EMBEDDED CO-SIMULATION	Daniel Muniz, Roman Cardenas, Patricia Arroba and Jose L. Risco-Martin	
			50	HEURISTIC FAILURE DETECTION IN DEVS-BASED SUPERVISORY CONTROLLER	Marina Murillo, Gabriel Wainer, Benjamin Earle, Hazel Griffith and Iryna Borshchova	
			85	ATTSYNCRIDGE: A DEVS PATTERN FOR STANDARDIZED DES-VR SYNCHRONIZATION VIA HLA	Joseph Jabbour, Jalal Possik, Mariane EL KASSIS, Danny Kieken, Charles Yaacoub and Greg Zacharewicz	

Tuesday, 5th May		Theory and foundations for Modeling and Simulation (TMS) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 5 Classroom 119	13:30-15:00	Chair TBD	5	HLA 4 FEDERATE PROTOCOL PERFORMANCE EVALUATION: FIRST RESULTS	Frank Morlang and Steffen Strassburger	
			14	DEVS-VIT: A DEVS SIMULATION-BASED EXPLAINABILITY APPROACH FOR VISION TRANSFORMERS	Hy Ho Phuc, Ali Ayadi and Claudia Frydman	
			29	VIRTUAL POINT OF INTEREST-BASED OPERATIONAL SPACE CONTROL FOR DUAL-ARM AERIAL MANIPULATORS	José Varela-Aldás, Angélica V. Quito and Bryan S. Guevara	
	15:00-15:30	Coffee Break				
Session Block 6 Classroom 119	15:30-17:00	Chair TBD	67	DATA-DRIVEN EXTRACTION OF AGENT-BASED MODEL COMPONENTS FROM EVENT LOGS USING PROCESS MINING	Hui Min Lee and Sanja Lazarova-Molnar	
			78	TUTORIAL: PARTICLE FILTER-BASED DATA ASSIMILATION FOR DISCRETE EVENT SIMULATION	Xiaolin Hu	

ANNSIM 2026 (Schedule - Tutorials and Workshops)

Monday, 4th May		Tutorials/Workshops Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 2 Classroom 117	13:30-15:00	Chair TBD	28	DEFINING DEVS MODELS WITH THE CADMIUM ENVIRONMENT	Cristina Ruiz Martin and Gabriel Wainer	
	15:00-15:30	Coffee Break				
Session Block 3 Classroom 117	15:30-17:00	Chair TBD	120	INTRODUCTORY TUTORIAL ON AGENT-BASED MODELING	CHARLES MACAL	

Tuesday, 5th May		Tutorials/Workshops Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 5 Classroom 110	13:30-15:00	Chair TBD	41	ENABLING SCALABLE LIDAR PERCEPTION VIA LIGUARD AND HIGH-FIDELITY DIGITAL TWINS	Muhammad Shahbaz	
	15:00-15:30	Coffee Break				
Session Block 6 Classroom 117	15:30-17:00	Chair TBD	12	MULTI-AGENT, MULTI-MODAL, AND EXTENDED REALITY (XR) TRANSPORTATION SIMULATION & TESTING USING THE MCITY (2.0) DIGITAL TWIN	Chaozhe He, Austin Angulo, Irina Benedyk, Kevin F. Hulme, Ye Wang, Vivek Viswam and Sen Jiang	

ANNSIM 2026 (Schedule - WIP)

Wednesday, 6th May		Work in Progress (WIP) Presentations				
Session Block	Time	Session Chair	Paper #	Paper Title	Authors	Presenters
Session Block 7 Classroom 110	9:00-10:30	Chair TBD	124	APPLICATION OF MACHINE LEARNING ALGORITHMS IN CO2 BASED DEMAND CONTROL VENTILATION	Elham Hasani Alavy	
			126	MODELING THERMAL STRESS AS NETWORK IMPEDANCE FOR HEAT-AWARE PEDESTRIAN ROUTING AND NEIGHBORHOOD PLANNING	Runyu Wang and Yang Yang	
			128	AGENTIC DATASETS AS A CONTROL-PLANE ABSTRACTION FOR DATA-INTENSIVE SYSTEMS	Alexander Chernov	
	10:30-11:00	Coffee Break				
Session Block 8 Classroom 110	11:00-12:30	Chair TBD	129	SYSTEM PREPARATION AND ALL-ATOM MOLECULAR DYNAMICS SIMULATION OF WATER-GLYCEROL MIXTURES AT SUPERCOOLED TEMPERATURES	Stephaine F. Gordon, John Hansen and Ana Stanescu	
			131	UNSUPERVISED ANOMALY DETECTION IN DEVS LOGS	Benjamin Earle, Curtis Edward Winstanley, Gabriel Wainer and Iryna Borshchova	
			132	A PROPOSAL FOR ACHIEVING THE REAL-WORLD APPLICATION OF LONG-RANGE HEALTH SYSTEM SIMULATION BASED ON TWO CASE STUDIES	Ashish Kumar, Constance Xue Rui Neo, Manimegalai Kailasam, Audrey Tze Ting Khoo, Geoffrey Kah Tack Gui, Hiang Khoon Tan, Yi Feng Lai and Shao Wei Sean Lam	