

2026 SNAS Interdisciplinary Research Conference Program

October 9-10, 2026 | George Mason University (Mason Square), Arlington, VA, USA

“Trustworthy Innovation, Learning, and Human Development in the Age of Intelligent Systems”

Program at a Glance on October 9th, 2026 (Online sessions will be held on October 10th, 2026)

Time	Program	Details
8:00-9:00 AM	Registration and Breakfast	Conference Registration Area (Vernon Smith Building - Pilot Space)
9:00-9:30 AM	Welcome and Opening Remarks	Van Metre Hall - Auditorium <i>Dr. Umit Karabiyik, Dr. Paulo Costa, and Dr. Hasan Arslan</i>
9:30-9:40 AM	<i>Transition to Parallel Sessions</i>	<i>All Parallel Sessions will be on the 4th floor of the Van Metre Hall</i>
9:40-11:00 AM	Parallel Sessions - Morning	Tracks A-D Four 20-minute presentation blocks
11:00-12:00 AM	Morning Keynote Address Title: <i>“The University in the Age of AI”</i>	<i>Dr. Amarda Shehu</i> Inaugural VP and Chief AI Officer; Associate Dean for Research; Professor, Department of Computer Science, George Mason University
12:00-1:15 PM	Lunch	Vernon Smith Building - Pilot Space
1:15-2:00 PM	Afternoon Keynote Address Title: <i>“Beyond Boundaries: Uniting Academia and Industry for Transformative Innovation”</i>	<i>Dr. Liza Wilson Durant</i> Professor and Associate Provost for Strategic Initiatives and Community Engagement, George Mason University Director of the Commonwealth Cyber Initiative (CCI) Northern Virginia Node
2:00-2:25 PM	Coffee / Networking Break	TBA
2:25-2:30 PM	<i>Transition to Parallel Sessions</i>	<i>All Parallel Sessions will be on the 4th floor of the Van Metre Hall</i>
2:30-4:10 PM	Parallel Sessions - Afternoon	Tracks A-D Up to five 20-minute presentation blocks
4:10-4:15 PM	<i>Transition to Poster Sessions</i>	TBA
4:15-5:00 PM	Reception and Poster Session 1	Silent Poster Session without author(s) during Hour Devours
5:00-5:45 PM	Reception and Poster Session 2	Poster Session with Presenting Author(s) during Hour Devours
5:45-6:00 PM	Closing Remarks and Announcements	Van Metre Hall - Auditorium

Presentation format: Each paper is assigned a 20-minute block. A recommended format is 15 minutes for the presentation and 5 minutes for questions and transition.

Parallel Tracks

Track	Session Theme	Room	Session Chairs
A	Trustworthy AI, Cybersecurity & Digital Governance	[Room A]	[Session Chairs TBA]
B	Intelligent Learning, Education & Human Development	[Room B]	[Session Chairs TBA]
C	AI for Health, Human Behavior & Society	[Room C]	[Session Chairs TBA]
D	Engineering, Sustainability & Applied Computational Science	[Room D]	[Session Chairs TBA]

October 9th, Morning Parallel Sessions | 9:40 AM - 11:00 AM

Four simultaneous tracks. Each paper receives a 20-minute presentation block.

Time	Track A	Track B	Track C	Track D
10:40-11:00 AM	ID 34: <i>What Cybersecurity Analysts Actually Want: A Mixed-Methods Survey of Explainable AI Expectations in Security Operations Centers</i> Presenter: Turgay Korkmaz	ID 63: <i>Navigating Artificial Intelligence in Special Education: Student Use, Perceptions, and Implications for Responsible Practice</i> Presenter: Seyma Intepe	ID 3: <i>The S.H.O.T. Project: Leveraging AI and Longitudinal Data to Study Police Use of Deadly Force</i> Presenter: Hasan Arslan	ID 38: <i>Reliability Challenges in Spacecraft Systems: A Literature Review of Failure Mechanisms and Engineering Mitigation Strategies</i> Presenter: Ayse Koc
11:00-11:20 AM	ID 47: <i>Operationalizing Zero Trust for Insider Threat Mitigation in Hotels: An Interpretative Phenomenological Study</i> Presenter: Yorkinjon Kurbonov	ID 19: <i>When Artifacts Deceive: Threat Modeling Assessment Integrity in the Age of Intelligent Systems</i> Presenter: Yernat Mnuar	ID 37: <i>Detecting Pre-Tremor MEG Beta-Power Changes in Parkinson's Disease: Toward Predictive Deep Brain Stimulation</i> Presenter: Farzana Sultana	ID 40: <i>ConstructionSafety-FaithBench: Auditing Visual-Evidence Faithfulness in Construction-Safety Vision-Language Models</i> Presenters: Md Kamruzzaman Kamrul and Eashraque Jahan Easha
11:20-11:40 AM	ID 88: <i>Comparative Macroeconomic Analysis and Strategic Intervention for AI Governance Policy</i> Presenter: Mark Paes	ID 48: <i>Agent-Based Modeling as an Intelligent Learning Environment for Systems Thinking</i> Presenter: Tugba Karabiyik	ID 44: <i>Physics-Governed Cardiovascular Digital Twins for Trustworthy Hemodynamic Prediction During Hemorrhagic Shock</i> Presenter: Sara Hassan	ID 42: <i>Mitigating Effects of Single Event Effects in Space Applications Using Recomputation</i> Presenter: Hakduran Koc
11:40 AM-12:00 PM	ID 82: <i>Automating Web Application Vulnerability Detection: A Generative AI and Security Tool-Based Penetration Testing Framework</i> Presenter: Sariha Sanjeena	ID 55: <i>Cultivating Human Agency through AI-Supported Problem-Based Learning</i> Presenter: Jihyae Choe	ID 51: <i>Behavioral Intelligence for Smart Finance: Modeling Secure Financial Decisions in the FinTech Ecosystem</i> Presenter: Enrika Huseni	ID 66: <i>Trusted Execution Environment (TEE) for Solving the Replication Crisis in Academia</i> Presenter: Jiasun Li

October 9th, Afternoon Parallel Sessions | 2:30 PM - 4:10 PM

Tracks A, and D conclude after four afternoon papers; Track B and C use the fifth slot for the ninth presentation.

Time	Track A	Track B	Track C	Track D
2:30-2:50 PM	ID 76: <i>Does Retrieval Engineering Offset Model Scale? A Controlled Study on Email Question Answering</i> Presenter: Kerem Cakmak	ID 52: <i>Humanizing Digital Ecosystems: Voice-Mediated Technologies as Catalysts for Identity, Relational Support, and Well-Being</i> Presenter: Omer Topaloglu	ID 70: <i>The Use of Technology During Pandemic Governance: A Comparative Study of the COVID-19 Responses of the United States, the United Kingdom, and South Korea</i> Presenter: Melanie Turza	ID 62: <i>TESS Follow-up Observations of TOI-5907</i> Presenter: Ulugbek Abduraimov
2:50-3:10 PM	ID 89: <i>Process as Provenance: Third-Party Telemetry as a Trust Mechanism</i> Presenter: Mark Paes	ID 10: <i>Exploring the Roles of Individual Learning, Artificial Intelligence, and Creativity in Predicting Student Success</i> Presenter: Hana Alaghand	ID 72: <i>Tariffs and Their Impact on American Consumers, Producers, Businesses, and Trade</i> Presenter: Selin Daskiran	ID 65: <i>Flexible Computing Loads, Electricity Grid Resilience, and Carbon Emission Reduction</i> Presenter: Jiasun Li
3:10-3:30 PM	ID 94: <i>Fine-Tuning Large Language Models for Phishing Webpage Detection</i> Presenter: Ephraim Osei	ID 77: <i>Implementation of AI and SDGs in Higher Education</i> Presenter: Adam Mehmet Kilic	ID 92: <i>Public Reactions to Immigration Enforcement: An LLM-Based Analysis of Media Audience Responses to the Deaths of Renée Good and Alex Pretti</i> Presenter: Ekrem Mus	ID 59: <i>Multi-Attribute Ranking on Hypergraphs via Sheaf Laplacians: An Application to NBA Player Evaluation</i> Presenter: Mehmet Aktas
3:30-3:50 PM	ID 96: <i>Trustworthy Temporal Graph Learning via Adaptive Snapshot Compression</i> Presenter: Madeeha Kanwal	ID 78: <i>Human-Centered Learning in the Age of Intelligent Systems: Lessons from the Hizmet Educational Model</i> Presenter: Zeynep Selma Guney	ID 97: <i>Artificial Intelligence in Cancer Research and Clinical Trials: A Translational Medicine Perspective from Foundation Models to Agentic AI</i> Presenter: Kubra Karagoz	ID 73: <i>Consolidation of Micro Turbojet Design Using Additive Manufacturing</i> Presenter: Ryan Weigand
3:50-4:10 PM	Session wrap-up / transition	ID 83: <i>Fit for the Task? Educator Perceptions of FERPA Governance in the Age of Generative AI</i> Presenter: Timothy Mcaliley	ID 99: <i>Trustworthy Governance and Human Rights: A Qualitative Study of Rights Violations Against Ill and Elderly Detainees in Turkey</i> Presenter: Fatih Balci	

2026 SNAS Interdisciplinary Research Conference Program (Online Sessions)

Saturday, October 10, 2026 | Eastern Time (ET)

Program at a Glance

Time	Program	Format / Location
9:00–11:00 AM	Online Oral Presentations - Three Parallel Sessions	Virtual Rooms A, B and C
11:00–11:15 AM	Transition Break	Online
11:15 AM–1:15 PM	Online Poster Short Talks - Single Session	Virtual Poster Room

Presentation Timing

- **Oral presentations:** 20 minutes per presentation, including Q&A and transition.
- **Online poster short talks:** 10 minutes per presentation, including brief Q&A and transition.
- **Virtual links:** Zoom/meeting links TBA

Online Oral Session A - Trustworthy AI, Governance & Digital Systems

Date: Saturday, October 10, 2026

Time: 9:00–11:00 AM ET

Location: Virtual Room A

Session Chair: Dr. Omer Topaloglu

Format: Six 20-minute oral presentation blocks, including Q&A and transition.

Time	ID	Presentation	Presenter(s)
9:00–9:20 AM	5	Trustworthy AI Beyond Performance: Environmental and Ethical Constraints	Mehmet Orhan
9:20–9:40 AM	36	When Do Agent Failures Become Visible? Model-Dependent Warning Horizons in LLM Agents	Ojonugwa Ejiga Peter
9:40–10:00 AM	18	Resource-Efficient Serial and Parallel FPGA Implementations	Md Ragib Shaharear
10:00–10:20 AM	35	What the Medina Charter Teaches About AI Governance	Celil Akgobek
10:20–10:40 AM	79	Trustworthy Digital Governance Under Democratic Backsliding: The Case of Türkiye	Leyla Ozbey
10:40–11:00 AM	95	From Execution to Judgment: Data Science Foundations in the Age of Generative AI - A Collaborative Retrospective Analytic Autoethnography of The Data Mine	Aparajita Jaiswal

Online Oral Session B - AI in Education, Business & Human-Centered Applications

Date: Saturday, October 10, 2026

Time: 9:00–11:00 AM ET

Location: Virtual Room B - [Zoom Link]

Session Chair: TBA

Format: Six 20-minute oral presentation blocks, including Q&A and transition.

Time	ID	Presentation	Presenter(s)
9:00–9:20 AM	8	An Inquiry-Based Pedagogical Framework with AI to Learn Secure, Resilient and Maintainable Programming	Kazi Zakia Sultana
9:20–9:40 AM	24	AI as Peer, AI as Instructor: Epistemic Authority in Student Evaluation of Humanity-Centered Design Projects	Mustak Ahmad
9:40–10:00 AM	16	Toward Affordable University AI Laboratories	Abdulkerim Oncu
10:00–10:20 AM	86	Use of Artificial Intelligence in Sustainable Learning	Haiyan Su
10:20–10:40 AM	14	Artificial Intelligence in Real Estate: A Literature Review of Valuation, Digital Infrastructure, Investment Analytics, and Business Communication	Irmak Teker
10:40–11:00 AM	87	The Psychological Impact of Influencer Culture on Adolescents and Young Adults	Nihal Estelik
11:00 AM–11:20 AM	49	Bridging the Awareness-Behavior Gap: Student Perceptions, Behaviors, and Ethical Awareness of Generative AI in Higher Education	Zeliha Ozdogan

Online Oral Session C - Sustainable Engineering & Biomedical Computing

Date: Saturday, October 10, 2026

Time: 9:00–11:00 AM ET

Location: Virtual Room C - [Zoom Link]

Session Chair: TBA

Format: Six 20-minute oral presentation blocks, including Q&A and transition.

Time	ID	Presentation	Presenter(s)
9:00–9:20 AM	33	Reducing Pavement Life-Cycle Impacts Through Fracture-Optimized Cement-Treated Base Design	Dru Patel
9:20–9:40 AM	61	Biochar-Modified Polymer Concrete from Construction and Demolition Waste: Mechanical Performance and Embodied Carbon	Zuweina Al Kindi
9:40–10:00 AM	54	Techno-Economic Optimization of Partial Ground-Albedo Treatment for Fixed-Tilt Bifacial Photovoltaic Plants	Muhammad Usama
10:00–10:20 AM	74	Network-Structured Computational Polypharmacology of Spreading-Depolarization-Linked Targets in Migraine With Aura	Muharrem Kendirci
10:20–10:40 AM	75	A Mechanistic Digital Twin for Predicting Physiological Strain, Physical Performance, and Cognitive Performance to Support Operational Decision-Making	Oyshik Bhowmik
10:40–11:00 AM	93	Border Fuzziness from Model Uncertainty: A Self-Reporting Automatic Skin-Lesion Tracer	Levend Eski & Hakan Celepcikay

Online Poster Short Talks

Date: Saturday, October 10, 2026

Time: 11:15 AM–1:15 PM ET

Location: Virtual Poster Room

Session Chair / Moderator: Dr. Omer Topaloglu

Format: Twelve 10-minute short talks, including brief Q&A and transition. No parallel tracks.

Time	ID	Presentation	Presenter(s)
11:15–11:25 AM	7	Artificial Intelligence as a Support for K–12 Teacher Well-Being: Exploring the Potential of AI to Reduce Workload and Burnout	Irem Balta-Akarsu
11:25–11:35 AM	9	An Interdisciplinary Mentorship Model for AI-Augmented Research: Democratizing Bioinformatics for High School Students	Fatma Arslan, Mario Flores, Meryem Korkmaz and Hafsa Tek
11:35–11:45 AM	25	AI-Assisted vs. Traditional Technical Writing in Mechanical Engineering Labs: Implications for Learning and Self-Regulation	Mehmet Kelestemur and Mohamed Ibrahim
11:45–11:55 AM	26	Revisiting AI Surveillance in K–12 Education: A Case Study of Lightspeed Alert in a Connecticut Public School District	Jennifer Bassett and Hasan Arslan
12:05–12:15 PM	12	Trustworthy AI in Cross Cultural Marketing	Carson Duncan
12:15–12:25 PM	1	Air Quality Awareness and Perception Survey	Michael Avdeev
12:25–12:35 PM	23	PorobNN: Amortized, Calibrated Bayesian Inversion of a Total-Pressure Biot Operator for In-Silico Brain Poroelastography	Stanley Diala and Mingchao Cai
12:35–12:45 PM	27	Fear of Unrealized Potential: An Exploratory Mechanism Linking Maladaptive Perfectionism, Intolerance of Uncertainty, and Psychological Distress in High-Achieving Adolescents	David Hyde
12:45–12:55 PM	56	The Psychological Impact of Psoriasis on Mental Health: A Biopsychosocial Dermatological Analysis	Irmak Teker
12:55–1:05 PM	85	How Does Parentification in Immigrant Households Affect Adolescent Development?	Nihal Estelik
1:05–1:15 PM	64	To What Extent Has BYD's Cost Leadership Strategy Contributed to Its Competitive Position Against Tesla in the Global Electric Vehicle Market?	Tuna Temur

Thank you to all presenters, moderators, and participants.