

SEET 2026 Program

Penn State Erie, The Behrend College

<u>Conference Banquet</u>		
<u>08/09/2026</u>		
<u>Venue: The Colony Family, 2670 W 8th Street, Erie, PA</u>		
<u>Time: 6:00 PM – 8:30 PM</u>		
<u>08/10/2026</u>		
<u>First Day Activities Schedule</u>		
<u>Time</u>	Conference Room: Burke REDC 180	
7:00 AM - 9:00 AM	Check-in and Continental Breakfast (REDC 180)	
9:00 AM - 9:10 AM	Welcome Talk – Prof. Timothy Kurzweg, General Chair, SEET 2026	
9:10AM - 9:15 AM	Welcome and introduction: Prof. Ralph Ford, Chancellor of Penn State Behrend	
9:15 AM - 9:20 AM	Research at PSU – Dr. Alicyn Rhoades (Distinguished Professor of Engineering), Vice Chancellor and Associate Dean for Research and Graduate Studies	
9:20AM - 10:20 AM	Keynote: Agentic Systems: The Next Evolution of Software Engineering David Kohn AVP - Head of AI & Emerging Technologies at ValueMomentum Zoom Link https://psu.zoom.us/j/99893549263	
10:20 AM - 10:40 AM	Group Picture (Burke REDC 180) Coffee Break (In front of Burke REDC 001/002)	
Session 1		
Time	Room: Burke REDC 001 Session Chair: Dr. Mansoor Ahmed Zoom Link https://psu.zoom.us/j/96872023152	Room: Burke REDC 002 Session Chair: Dr. Mohammad Abid Zoom Link https://psu.zoom.us/j/93484850593
10:40 AM – 11:00 AM	90 Unified DT–FL–DRL–Blockchain Framework for MEC Offloading Anthony Gladdney, Shashi Bhushan Jha	85 Comparative Study of Security Testing Tools for Distributed Web Applications Bouchaib Falah, Grace Julius, Onyedikachi Kanu, Chinyere Offor

11:00 AM – 11:20 AM	80 <i>AI-Driven Autonomous Data Pipeline Orchestration in Cloud-Native Enterprise Platforms</i> Sudhir Saxena	134 <i>Eye-RIS: Design and Evaluation of a Low-Latency Voice-Driven AR System for Real-Time Clinical Document Analysis on Smart Glasses</i> Robert John Luther Bennethum , Zainab Elahi Qazi, Ozge Selin Ak , Logan Swartz , Griffin Garman, Isiah Milien , Matthew Prage , Paul Koci , Sultan Al Nahian , and Sayed Mohsin Reza
11:20 AM – 11:40 AM	89 <i>Development of a Child-Friendly Constraint-Induced Movement Cast Using 3D Scanning and 3D Printing</i> Remington Orange, Bibiana M. Steckel, Christopher R. Shelton	163 <i>AI Danger Perception, Ethical Use, and Professional Regulation: A Framework for Algorithmic Alignment and Risk Management</i> Intisar Rizwan, Mohammad Atif
11:40 AM – 12:00 PM	73 <i>Data Mesh as a Migration Strategy: A Federated Approach to Cloud-Native Data Engineering</i> Richa Solanki	161 <i>An Empirical Investigation of Soft Skills and Corresponding Challenges in International Software Engineering Education</i> Sajid Ibrahim Hashmi, Jouni Markkula
Conference Room: Burke REDC 180		
12:00 PM – 01:00 PM	Keynote: Prof. Stephan Bayne Vice President for National Security & Executive Director, CISI Critical Infrastructure Security Institute Texas Tech University Zoom Link https://psu.zoom.us/j/96037970389	
01:00 PM - 02:00 PM	Lunch (Clark Café)	
Conference Room: Burke REDC 180		
2:00 PM - 2:45 PM	Keynote: AI Shadow Dr. Mohammad Atif Farid Chief Artificial Intelligence Officer & CISO, Cyquent Inc., and Healable AI Zoom Link https://psu.zoom.us/j/91656173361	
2:45 PM - 3:25 PM	SRC (Poster Presentation) In front of Burke REDC 180	

3:00 PM - 3:25 PM	Coffee break (In front of Burke REDC 001/002)	
Session 2		
Time	Room: Burke REDC 001 Session Chair: Dr. Sayed Mohsin Reza Zoom Link https://psu.zoom.us/j/97976011839	Room: Burke REDC 002 Session Chair: Dr. Dusan Ramljak Zoom Link https://psu.zoom.us/j/98976626325
3:25 PM – 3:45 PM	180 Self-Healing Cloud Infrastructure: Integrating Multi-Agent Reinforcement Learning with Policy-Driven Autonomy for Resilient Enterprise Operations Balasubramanian Jagannathan	140 VirNetMTD: Programmable Moving Target Defense for Virtualized Networks Thu Dang , Li Wang , Xing Zhou
3:45 PM – 4:05 PM	124 Intrinsic Training and Compounding Accuracy: Designing AI-Assisted SAS-to-R Migration in Clinical Trials David Ju and Nathalia Nascimento	114 Affective and Behavioral Computing for Autism Spectrum Disorder Detection: A Survey Jillienne Lapid, , Muhammad Abid, Md Selim
4:05 PM – 4:25 PM	113 Machine Learning Techniques for Predominant Musical Instrument Recognition in Polyphonic Audio: A Survey of Time-Frequency Representations and Deep Learning Architectures Christian Cimaglia, Muhammad Abid	162 AI Turning Static Exports into Actionable Health Intelligence Mohammad Atif
4:25 PM – 4:45 PM	75 Resource-Efficient Deep Learning for Type 2 Diabetes Mellitus Prediction: A Comparative Case Study Abdul Shaikh, Murtala Abubakar, Amira AlAmri, Naresh Adhikari and Ashhadul Islam	100 CASL: A Software Framework for Gesture-Driven, Context-Aware Layout Design in Virtual Reality Annika Brown, Katie Ho, Trudi Di Qi
4:45 PM – 5:05 PM	178 A Reproducible Multi-View Mammogram Classification Baseline Using Dual-View Fusion on VinDr-Mammo Jitendra Sai Kota, Saddam Hossain Irfan, and Muhammad Imran	

08/11/2026		Second Day Activities Schedule	
Time	Activities (Room 180, 001, 002)		
7:30 AM – 8:30 AM	Continental Breakfast (In front of REDC 001)		
SRC and PhD Track Sessions			
	Burke REDC 001 Session Chair: Dr. Mei-Huei Tang	Online Session Session Chair: Dr. Arif Ali Khan Zoom Link https://psu.zoom.us/j/96108414036	
8:30 AM – 8:50 AM	SRC-1	148: Epic-Organized vs. Requirement-Aligned Gherkin: An Empirical Evaluation of LLM-Based Acceptance Criteria Generation Shahbaz Siddeeq , Mateen Abbasi , Jussi Raskul , Zheyang Zhang, François Christophe , Tommi Mikkonen , Pekka Abrahamsson	
8:50 AM – 9:10 AM	SRC-2	158: An Overview of Human Aspects in the Alignment of Requirements Engineering and Testing Afsarah Jahin, Iflaah Salman Rahul Mohanani, Burak Turhan	
9:10 AM – 9:30 AM	SRC-3	168: HyQ-Guard – AI-Driven Runtime Anomaly Monitoring and Mitigation for Hybrid Quantum Workflows Ejaz Ahmed, Mikko Mäkitalo	
9:30 AM – 9:50 AM	SRC-4	169: Operationalizing the EU AI Act in Software Engineering: A Systematic Mapping Study with a Focus on Healthcare Qaiser Khan, Abdul Raffay Saeed, Rahul Mohanan	
9:50 AM – 10:30 AM	SRC-5	192: Supporting Reflection on Sustainable Software Design Decisions in Software Engineering Education: An Evaluation of a Socratic Chatbot Kseniia Suomalainen, Elena Cavallin, Viktoriia Olshanskaia, Maria Luce Lupetti, Jari Porras	
Note: Winner of the poster presentation will give an oral presentation			

10:30 AM 10:50 AM	Coffee break (In front of Burke REDC 001/002)	
Conference Room: Burke REDC 180		
10-50 AM – 11:50 AM	Keynote: Bridging the Gap Between Technical Research and the Public Sector Laura R. Dimino, Ph.D. – Assistant Director Center for Rural Pennsylvania A Legislative Agency of the Pennsylvania General Assembly Zoom Link https://psu.zoom.us/j/99296671544	
Session 3		
Time	Burke REDC 001 Session Chair: TBA Zoom Link https://psu.zoom.us/j/93274165534	Burke REDC 002 Session Chair: Dr. Satish Mahadevan Srinivasan Zoom Link https://psu.zoom.us/j/92931802653
11:50 AM – 12:10 PM	96 Self-Adaptive Swarm-Driven Big Data Pipelines for Dynamic Workload Optimization in Spark Environments Zulfiqar Ali, Israr Ur Rehman, Kashif Manzer, Muhammad Abdul Basit Ur Rahim	82 Engineering and Evaluating a Machine-Learning Monitoring Pipeline for Rare-Event Early Warning: A Reference Architecture and a Four-Layer Evaluation Methodology Rui Zong, Yutong Zhao, Sen He, Muhammad Abdul Basit Ur Rahim
12:10 PM – 12:30 PM	92 Anchoring Large Language Models and Digital Twins in Designing Deeply Personalized mHealth Platforms Muhammad Irfan Khalid, Joe Zhao, Aamir Shahzad, Muhammad Javed, Mansoor Ahmed	142 A Hybrid-Simulation LoRaWAN Honeypot for Detecting RF and Protocol Attacks against IoT Networks: A Cyber-Electromagnetic Activities Perspective Ali Al-Mehaizaa, Gabriele Oligeri, Faisal Al-Bishri, Adnan Akhunzada
12:30 PM – 12:50 PM	88 Lightweight Data Lineage Tracing for Cross-Function Leak Detection in Serverless Applications Zuhaib Nishter, Gang Li	121 An Explainable Neuro-Fuzzy Multimodal Fusion Approach for Lightweight Edge-based Plant Disease Detection in Precision Agriculture Muhammad Abdullah, Tanzila Kehkashan, Domagoj Tuličić, Nikola Ivković, Adnan Akhunzada

12:50 PM - 1:50 PM	Lunch (Clark Café)	
Session 4		
Time	Burke REDC 001 Session Chair: Dr. Li Wang Zoom Link https://psu.zoom.us/j/93088239838	Burke REDC 002 Session Chair: Dr. Mohammad Imran Zoom Link https://psu.zoom.us/j/93921542548
01:50 PM – 02:10 PM	38 <i>A Gate-Based Quantum Ising Model Approach to Solving KenKen Puzzles Using Binary Encoding</i> Wen-Li Wang, Mei-Huei Tang, Kevin Wang, Shahid Hussain, Saif Ur Rehman Khan	27 <i>Driving Governance and Adoption in Custom Faculty Workload System Integrations within Cloud ERP for Community Colleges</i> Sanjiv Kumar Bhagat
02:10 PM – 02:30 PM	13 <i>Dynamics of Artificial Intelligence and Its Impact on Modern Higher Education</i> Rashid Khan	91 <i>Applying Metamorphic Testing to Machine Learning: A Systematic Mapping Study</i> A. Redempta Manzi Muneza, Kaveen Liyanage, Faeer Ur Rehman, Emma Sheppard , Ann Marie Reinhold
02:30 PM – 02:50 PM	131 <i>The Effectiveness of Feedback Design for Improving LLM-based Code Generation in Quantum Optimization Algorithms</i> Venkata Sai Prathyush Turaga , Sonali Uttam Singh, Akbar Siami Namin	125 <i>HERO: A Measurement Framework for Cost-Energy-Latency Trade-offs in Hybrid Quantum-Classical Cloud Workloads,</i> Mr. Nirmitt Dagli, Dr Taskin Kocak Kocak Rongyu lin, Kruti Shah , Sanjeev Kumar Marimekala
02:50 PM – 03:10 PM	108 <i>Closing the Inconsistency Trap: Unified Cross-Layer Deception via Adversarial LLM Transformation</i> Osamah Mansoor , Adeel Anjum, Madiha Haider Syed , Dr. Muhammad Talha Gul , Jie Zhao	129 <i>Engineering Reliable Image-Forgery Localization Systems: A Multi-Dataset Study of Topology-Aware Vision Transformers</i> Lavanya Mandava, Rohit Biswa Karma, Shanmukh Gopinath Mandava

3:10 PM – 3:30 PM	Coffee Break (In front of Burke REDC 001/002)		
Session 5			
Time	Burke REDC 001 Session Chair: Dr. Mansoor Ahmad Zoom Link https://psu.zoom.us/j/99099808124	Burke REDC 002 Session Chair: Dr. Zulfiqar Ali Zoom Link https://psu.zoom.us/j/91037749585	Room 207 Session Chair: TBA Zoom Link https://psu.zoom.us/j/97038182300
3:30 PM–3:50 PM	98 ARQM-LITE: A Small Tool for Requirements Quality Analysis Dylan Porter, Satish Mahadevan Srinivasan	139 VALS: A Model-Agnostic Virtual Reality Framework for Real-Time Annotation of 3D Anatomical Models Pranav Balachander, Lasya Madhuri Gundapaneni, Yamini Satish1 and Khush Mistry, Evan Goldman, Sayed Mohsin Reza	141 Phishing Attack Detection using Genetic Algorithms and Artificial Neural Networks Ali Al-Mehaizaa , Mohammed Al-Mansoori, Mohammed Al-Mohannadi Abdullah Al-Ghushami, Adnan Akhunzada
3:50 PM – 04:10 PM	101 FlowAttester: Towards a Runtime Flow Attestation Framework in Programmable NeoCloud Networks Li Wang, Anbang Ruan	150 Generative AI, Agentic AI, MCP, and RAG for Improving Developer Productivity Rakesh Kumar, Bidanagere Nagaraju	171 Triangulating Prompt Engineering Effectiveness for Edge Case Detection: Integrating Expert Quality Review with Association Rule Mining in LLM-Driven Software Testing Usama Azhar, Saif Ur Rehman Khan
4:10 PM – 04:30PM	118 Indirect Feedback Alignment: A Viable Alternative for Deep Neural Networks Backpropagation Jonathan Teck Meng Liaw, Pulin Agrawal, Reza Abdollahi Dezfuli Nezhad, Dheeraj Gollu	120 RepoWise: A Conversational Framework for Open Source Repository Analysis with Retrieval-Augmented Generation and Structured Analytics Sankalp Kashyap, Arjun Ashok, Nafiz Imtiaz Khan, Vladimir Filkov	123 SA-NET: A Self-Attention Approach for Early and Accurate Skin Cancer Diagnosis Toward Intelligent Dermatology Imran Ashraf, Tanzila Kehkashan, Ivan Mihaljevi, Nikola Ivkovi, Adnan Akhunzada
4:30 PM – 04:50 PM	122 Scalable and Interpretable Text Intelligence for Fake News Detection Imran Ashraf, Tanzila Kehkasha , Roko Miloševi, Nikola Ivkovi, and Adnan Akhunzada	157 Human-Grounded AI-Assisted Software Engineering Education: An Empirical Study of Learning Outcomes Junaid Shuja, Abir Saha	193 An Empirical Study of How Publication Context Relates to Repository Maintenance and Community Adoption in AI Research Repositories Sang Vo, Caijing Yang, Xuan Nguyen, Boshuai Ye, Arif Ali Khan
4:50 PM – 5:15 PM	Closing Ceremony		