

Time	Professional Development Location: Room 2	Software and Systems Engineering Location: Room 3	Cybersecurity and Privacy Location: Room E/F	Power & Energy Systems Location: Room 1	Quantum, AI, and Computational Intelligence Location: Room G/H	Autonomous & Vehicle Systems Location: Room 4	Photonics Location: Room 5	Biotechnologies Location: Room 6
8:00 – 9:15	Opening Keynote: Thriving in the Agentic Era - Main Ballroom							
9:25 – 10:15	Put Your Retirement Plan to Work	What’s a Technical Requirement?	Update on Post Quantum Computing Algorithms for Software Developers	Introduction to Steam Fundamentals	Quantum Frontiers in Biomedical Innovations	Artificial Intelligence in the Cockpit	HgCdTe Infrared Detectors and Technology at Leonardo DRS	Advances in Orthopedic Care: Novel Treatments for Labral Tears and Rotator Cuff
10:15 – 11:05	Vendor Exhibits/Student Poster Competition/Morning Break - Gallery							
11:05 – 11:55	Whisper to Shout: Upward Communication for Technical Leaders	REPLICA: RDMA-Based Reflective Memory for Ultra-Low Latency Distributed XIL Testing	When Cyber Meets Physical: How Attackers Target Industrial Control Systems	From Interoperability to Virtualization: The Power of IEC 61850	From Data to Direction: Turning Analytics into Action	Tactical E-Pilot	High-Performance and Scalable Heterogeneous Photonics Integration	Forever 21 – The Redox Strategy to Turn Back Aging
11:55 – 1:35	Lunch Program: Intelligent Vehicles: From Safe and Efficient Automation to Trusted and Harmonious Autonomy. Patron Recognition, & Student Poster Competition Results – Main Ballroom							
1:35 – 2:25	Upskilling in the AI Economy	Is the Software Engineer a CroMagnon in the Age of AI?	Aircraft Under Attack: The Fundamentals of Secure Aviation Design	Smart Regulation: Advanced OLTC Concepts for MV/HV Power Transformers	Megatrends in Microelectronics: Powering the AI Revolution and America’s Future	Challenges with Human Machine Teaming	Production MBE Capabilities for Optoelectronics	Extended FOV and Cellular-Resolution Light Sheet Microscopy
2:35 – 3:25	Four Strategies for Managing Concentrated Stock	Recognizing & Overcoming System Automation Challenges	FBI: Current Threats	Industrial Power: Planning for Today and Tomorrow	In Data We Trust - Make AI Great Again I Can See Clearly Now: Real-Time Dehazing at the Edge	The Wild World of Autonomous Vehicle Proofing: Triumphs, Trainwrecks, and Tech Growing Pains	Laser Components	Cell Therapies for Diabetes: Transforming Adult Stem Cells
3:35 – 4:25	Fund Your Engineering Ideas: How EPICS in IEEE Supports Community Projects and Professional Growth	Systems Engineering the Future with INCOSE INCOSE Standards Development	Cyber Impact Modeling of Industrial Systems: An Engineering-Informed Approach to OT Cybersecurity Risk	Can AI Be Sustainable? Energy-Efficient Strategies for Generative Models	The Future of Semiconductors for Aerospace and Defense - One Technology Does Not Fit All	Challenges of Human Command and Control of “Swarming” 1:N autonomous systems	Design & Optimization of Passive Imaging Systems	Zinc-Responsive Contrast Imaging Agents
4:25 – 5:30	Happy Hour & Thank You for attending Metrocon 2025! Hosted by the IEEE Fort Worth Section							

