

ERAU-NASA-NSF Aerospace Cybersecurity Workshop
April 16-17, 2025, Prescott, Arizona
<https://erau.edu/workshop>

Wednesday, April 16 (all times in Arizona time zone/GMT -7 hours)

VENUE	Student Union/Lower Hangar
7:00-8:00am	Registration and breakfast
8:00-8:10am	Welcome and Opening Remarks: Kenneth Witcher (ERAU-Prescott Chancellor) and Thomas Drape (ERAU CBSI Dean); <i>TBD</i> : NSF/NASA, Arizona State
8:10-8:15am	Overview of Agenda <ul style="list-style-type: none"> Krishna Sampigethaya (ERAU)
8:15-9:00am	Panel #1: Leadership Perspectives on Aerospace Cybersecurity Strategic vision, investment in cybersecurity, regulatory landscape, and leadership challenges in securing aviation and space systems. Moderator: Jerry Davis (Microsoft) Panelists: <ul style="list-style-type: none"> Doug Britton (RunSafe) Stephane Chopart (Airbus) Janet Grondin (Stellar Solutions) Levi Gundert (Recorded Future) David Hopkins (Mesa Air)
9:00-10:00am	Panel #2: Aircraft and Airline Cybersecurity Focuses on cyber threats to aircraft systems, airline operations, and airport infrastructure, including avionics, IT/OT security, and passenger data protection. Moderator: Scott McCrea (Honeywell Aerospace) Panelists: <ul style="list-style-type: none"> Mathew Barreras (Mesa Air) Pamela Davis (Southwest Airlines) Kathleen Finke (Astronautics Corp) Matthew Kosednar (United Airlines) Timothy Mitchell (TM Mitchell Engineering) Daniel Riechers (Collins Aerospace)
10:00-10:15am	<i>Break</i>
10:15-11:15am	Panel #3: Emerging Industry Advances Showcases the latest industry-driven innovations in aerospace and cybersecurity, including AAM security, AI-driven security, zero trust architectures, and quantum cryptography. Moderator: Anne Boettcher (ERAU) Panelists: <ul style="list-style-type: none"> Sanjay Bajekal (Collins Aerospace) Frederick Jones (Raytheon Technologies Research Center) Sivaraman Mani (Honeywell Aerospace) Nayyar Rao (Honeywell Aerospace) Stefan Schwindt (GE Aviation)

11:15-12pm	<p>Panel #4: Cyber Intelligence and Incident Response Explores cyber threat intelligence, risk forecasting, and threat actor analysis, highlighting how AI, data analytics, and collaboration improve threat detection and mitigation. Moderator: Jon Haass (ERAU) Panelists:</p> <ul style="list-style-type: none"> • Levi Gundert (Recorded Future) • Riley Montgomery (FBI) • Stephen Thomas (NIRT)
12:00-1:15pm	<p>Lunch (provided to all registered attendees)</p> <ul style="list-style-type: none"> • Student research poster presentations (attendees evaluate and choose best poster). • Aviation Cyber CTF Overview, ERAU-Prescott CTF Dev Team.
1:15-2:05pm	<p>Panel #5: Space Cybersecurity Examines cybersecurity challenges in space systems, including satellite security, communication network threats, and strategies for securing commercial and government space operations. Moderator: Ron Madler (ERAU) Panelists:</p> <ul style="list-style-type: none"> • Jerry Davis (Microsoft) • Drew Hamilton (TAMU) • Alefiya Hussain (USC ISI) • Derek Schatz (Virgin Galactic) • Matt Tomarchio (Deloitte)
2:05-2:50pm	<p>Panel #6: Cyber Resilience Discusses strategies, best practices, emerging challenges, and innovations for enhancing aerospace cyber resilience. Moderator: Dan Diessner (ERAU CARS) Panelists:</p> <ul style="list-style-type: none"> • William D. Bryant (MTSI) • Lawrence Marsala (BAE Systems) • Matt Mayes (Aerospace Village) • Brian North (Lockheed Martin) • Kyle Wilkerson (ERAU)
2:50-3:00pm	Break
3:00-3:50pm	<p>Panel #7: Research Trends Applicable to Aerospace Cybersecurity Presents emerging research topics and breakthroughs from academia and research labs, bridging gaps between fundamental research and real-world applications. Moderator: Drew Hamilton (TAMU) Panelists:</p> <ul style="list-style-type: none"> • Dan Diessner (ERAU/CARS) • Farid Dowla (LLNL) • Addy Moran (PNNL) • Kandy Phan (Sandia National Labs) • Rajendra K. Raj (RIT) • Raja Sengupta (UC Berkeley)

3:50-4:50pm	Engagement Exercise for Students and Professional Attendees Students and professionals interact in a group activity that may focus on either an aerospace cyber war game or a speed networking + challenge exercise.
5:00-5:50pm	IMAX-Length Movie: Living in the Age of Airplanes Venue: Planetarium
6:00-7:00pm	VISITING STUDENTS: Campus dinner at Earhart's (get your Dinner Voucher at the registration desk!)
6:30-8:30pm	Off-site working dinner (open to registered professional attendees). Reflection on some of last year's grand challenges, a facilitated discussion on emerging issues, and strategies/opportunities to support SFS scholars, such as temporary job assignments, amid federal and DoD hiring delays.

Thursday, April 17 (all times in Arizona time zone/GMT -7 hours)

Note: two separate venues on campus are listed below.

VENUE	Davis Learning Center (DLC) Auditorium	Lower Hangar
7:00-8:00am	Registration and Breakfast	CTF Registration/Breakfast
8:00-8:05am	Recap of Day-1 and Overview of Day-2 Agenda Krishna Sampigethaya (ERAU)	Aviation Cyber Capture-The-Flag (CTF) STARTS
8:05-9:00am	Panel #8: Aviation Cybersecurity Regulations and Standards Focuses on evolving aviation cybersecurity regulatory frameworks, standards and certification requirements, with insights from industry leaders. Moderator: Sanjay Bajekal (Collins Aerospace) Panelists: <ul style="list-style-type: none"> • Douglas Britton (RunSafe) • Glenn Burnett (Bell) • Don Christie (Honeywell) • Jens Hennig (GAMA) • Stefan Schwindt (GE Aerospace) 	Aviation Cyber CTF (University teams will compete. Industry attendees encouraged to serve as mentors or participate in the CTF as a learning exercise)
9:00-9:50am	Panel #9: Workforce and Training Needs Addresses the growing demand for cybersecurity professionals, discussing workforce challenges, skill gaps, and training programs to build a robust cyber workforce. Moderator: Parker Northrup (ERAU Prescott) Panelists: <ul style="list-style-type: none"> • Matt Mayes (Aerospace Village) • Kandy Phan (Sandia National Labs) • Rajendra K. Raj (RIT) • Drew Recker (Lockheed Martin) • Jayla Thirtyacre (FBI) 	

9:50-10:00am	Break	<p>Lunch for all attendees at 12pm, co-located student poster presentations and CTF activity.</p> <p>Aviation Cyber CTF (University teams will compete. Industry attendees can register to serve as mentors or participate in the CTF as a learning exercise!)</p> <p>Aviation Cyber CTF ENDS</p> <p>Award Presentations (CTF and Poster) in Lower Hangar</p>
10:00-10:50am	<p>Panel #10: Leadership Journeys in STEM and Aerospace Cybersecurity</p> <p>Moderated by students, this panel features professionals from academia, government, and industry who share their experiences, career paths, and contributions to the STEM disciplines related to aerospace cybersecurity.</p> <p>Moderators: Morgan Finch, Kamryn Hoehne, Rebekah Sokoloski (ERAU-Prescott Cyber Students)</p> <p>Panelists:</p> <ul style="list-style-type: none">• Pamela Davis (Southwest Airlines)• Alefiya Hussain (USC ISI)• Janet Grondin (Stellar Solutions)• Kaela Martin (ERAU)• Addy Moran (PNNL)	
10:50am-12pm	<p>Collaboration Building Exercise: What we need from the other two?</p> <p>A collaborative session where industry, academia and government participants define their biggest needs and propose areas for deeper engagement and support.</p>	
12:00-1:30pm	<p>Lunch (in Lower Hangar) with Students</p> <ul style="list-style-type: none">• Student research poster presentations.• Engage in the CTF as a participant/mentor.	
1:30-1:45pm	<p>Aero Cybersecurity Grand Challenges from 2024 Workshop</p> <p>Krishna Sampigethaya (ERAU)</p>	
1:45-3:45pm	<p>Breakout Group Discussion:</p> <p>Emerging directions for aerospace cyber security research and education (participants breakout into smaller groups to discuss and identify grand challenges and related near-, mid-, and long-term goals, and report out)</p>	
3:45pm-4:00pm	<p>Next Steps: Where to go from here?</p>	
4:00-4:30pm	<p>Award Presentations (CTF and Poster) in Lower Hangar</p>	
4:30pm	<p><i>Workshop Adjourned</i></p> <p>(Optional: Guided tour of Prescott Flight Line available hosted by Prof. Parker Northrup)</p>	