

General Donald R. Keith Memorial Capstone Conference

April 23, 2026
West Point, New York



SYSTEMS

Conference Schedule

0715	1500	Registration	6 th Floor, Jefferson Hall
0740	0800	Judges Meeting	414 Jefferson Hall
0800	0830	Opening Remarks	Haig Room, Jefferson Hall
0845	0930	Session 1	Presentation Rooms
0930	1015	Session 2	Presentation Rooms
1015	1100	Session 3	Presentation Rooms
1100	1145	Session 4	Presentation Rooms
1145	1300	Lunch	
1300	1345	Session 5	Presentation Rooms
1345	1430	Session 6	Presentation Rooms
1500	1600	Walking Tour	1 st Floor, Jefferson Hall Starbucks - Main Entrance
1800	1830	Banquet Social Hour	West Point Club
1830	2030	Awards Ceremony	West Point Club



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Welcome Letter



Welcome to the 2026 General Donald R. Keith Memorial Capstone Conference at West Point.

This conference is held in honor of General Keith, former Commanding General of the U.S. Army Materiel Development and Readiness Command, whose career exemplified excellence in research, development, and the integration of complex systems to advance Army capabilities. His leadership during the development of the Army's "Big Five" reflects the enduring importance of systems thinking, innovation, and disciplined analysis which are principles that remain central to how we prepare for the challenges of today and tomorrow.

We are proud to once again partner with the Society of Industrial and Systems Engineering to host this event as a regional conference. This year's presentations showcase undergraduate research that applies systems engineering to complex, real-world problems from data-driven decision-making to the integration of emerging technologies to enable decisive action in increasingly complex operational environments.

As future Army officers, you will be called upon to operate in rapidly evolving and uncertain environments. The ability to think in systems, make informed decisions under uncertainty, and communicate effectively will be essential. The work presented here reflects those skills and highlights the critical role of systems engineering in shaping the future force.

This conference would not be possible without the support of many dedicated individuals and organizations. I extend my sincere appreciation to General Keith's family, the Society of Industrial and Systems Engineering, our panel of judges, and the faculty and staff who make this event possible.

Congratulations to all participating students. I hope you find this conference both rewarding and inspiring as you continue your journey of service and leadership.

All Systems Go!

A handwritten signature in black ink, appearing to read "Julia Coxen".

JULIA O. COXEN
COL, Professor U.S. Military Academy
Head, Department of Systems Engineering

General Information

Administrative Information:

Uniform: Cadets: White Over Gray, Military: ASU-A / AGSU-A, Civilian: Business Attire

Conference Office at West Point: The Capstone Conference Office/Registration Desk will be located on the 6th Floor of Jefferson Hall, in the Haig Room Foyer, and open on 23 April from 7:00 AM – 4:00 PM.

Contact Phone Number during the conference: 330-807-8901.

Lost/Found: The lost and found will be at the registration desk. Items not claimed at the end of the conference will be left with the faculty members in the Department of Systems Engineering, Mahan Hall, Building 752, 4th Floor.

Lunch: A judge and faculty lunch will be in the Department of Systems Engineering Conference room, 4th Floor, Mahan Hall. You may also purchase meals at the West Point Club or Grant Hall. In addition, the West Point shuttle buses will run to the front gate by Buffalo Soldier Field. It is a short walk to the following eateries in the town of Highland Falls: Westy's, Rafi's Gyro Loco, Dong Fong's Chinese Restaurant, McDonald's, Chipotle, Sushi King, Bean & Barrel Coffee and Lounge, and Delizia's Pizza Kitchen.

USMA Projects Day Research Symposium (PDRS) Events

You can visit the USMA PDRS website to see most of the GDRKMCC-26 schedule.

1. Select Departments
2. Select Systems Engineering

Projects are sorted by time.

Or

1. Select Projects
2. Search for project title

Use this QR code to visit the PDRS website.

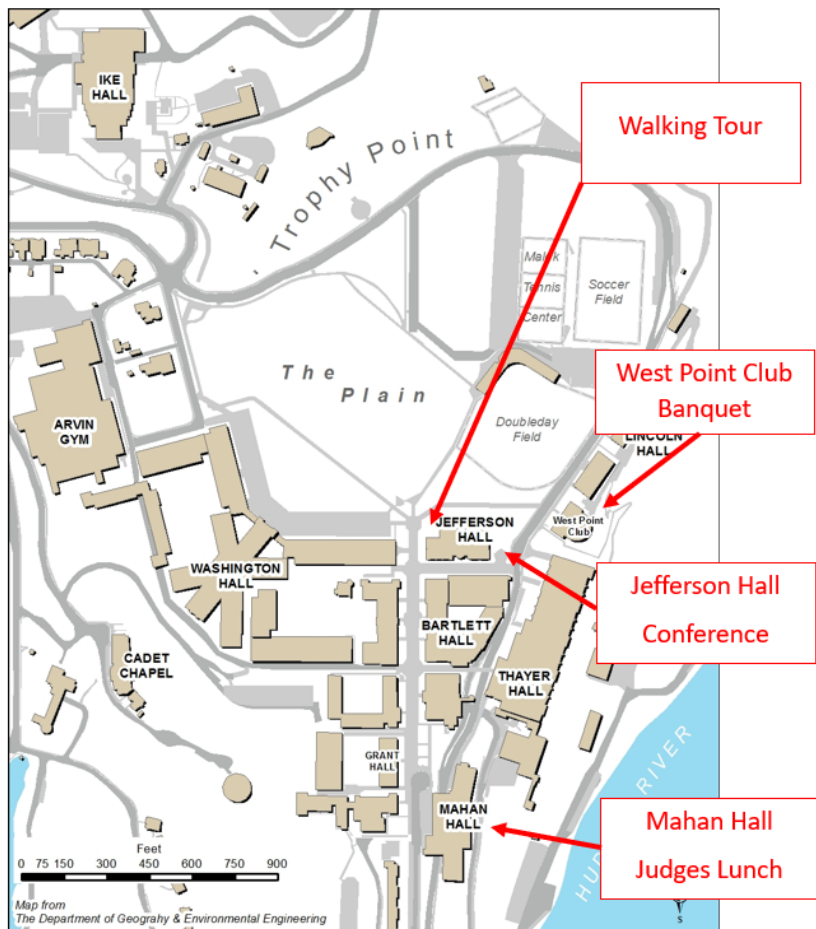


Note: PDRS is limited to only projects directly related to warfighting, lethality and readiness.

Shuttle Schedule



Guide Map of West Point



General Donald R. Keith Biography



General Donald R. Keith devoted more than 35 years of distinguished service to the United States Army, leaving a lasting impact on military modernization and the application of systems engineering across the force.

Born on 31 January 1927 in Ludington, Michigan, Keith first served as an enlisted Soldier during World War II before earning an appointment to the United States Military Academy at West Point. A member of the Class of 1949, he distinguished himself through both academic and extracurricular excellence.

Commissioned as a Field Artillery officer, he commanded units at every level, from battery through artillery group, including the 5th Battalion, 73rd Field Artillery and the 36th Field Artillery Group in U.S. Army Europe. His operational experience was complemented by key assignments in research, development, and analysis, including service in Vietnam (1971–1972) as Director of the Research and Analysis Directorate for Civil Operations and Revolutionary Development Support (CORDS).

General Keith's career increasingly centered on integrating technology, analysis, and decision-making at the highest levels of the Army. He served in senior roles within the Office of the Chief of Research and Development and later as Director of Weapon Systems under the Deputy Chief of Staff for Research, Development, and Acquisition. From 1976 to 1977, he served as Chief of Field Artillery, Commandant of the Field Artillery School, and Commanding General of the Field Artillery Center at Fort Sill. He later returned to the Pentagon as Deputy Chief of Staff for Research, Development, and Acquisition, where he helped oversee the Army's largest modernization effort called "The Big Five." This initiative produced five transformative systems: the M1 Abrams tank, M2 Bradley Fighting Vehicle, AH-64 Apache attack helicopter, UH-60 Black Hawk helicopter, and the Patriot missile system. Developed as an integrated capability, these systems reflect an early and powerful application of systems engineering, aligning technology, doctrine, and operational needs to achieve battlefield effectiveness.

Upon promotion to General, Keith assumed command of the U.S. Army Materiel Development and Readiness Command (now U.S. Army Materiel Command), where he continued advancing the integration of research, development, acquisition, and sustainment across the Army. He retired on 28 June 1984 and later served as Chairman and CEO of Cypress International.

General Keith's legacy endures through both the capabilities he helped develop and the continued emphasis on systems thinking in solving complex military challenges. The General Donald R. Keith endowment further extends this impact by supporting cadet education within the Department of Systems Engineering.

Judges by Track

This conference would not be possible without the exceptional support of our dedicated judging team. We are grateful to all of our judges for generously sharing their time, expertise, and perspective with our student teams. We extend special thanks to Dr. Anand Iyer, and the Society of Industrial and Systems Engineering team for their continued partnership and support in helping make this conference a success year after year.

1) Decision Analysis

LTC John Caddell (Chair), Mr. Sabesan Balasundaram, CPT Sarah Starr

2) Project and Engineering Management

Dr. Isabella Sanders (Chair), Mr. Tom Coradeschi, Dr. Kate Abel

3) Systems Design for Defense Applications

COL Brandon Thompson (Chair), Mr. Matt Pierce, Dr. Simon Goerger

4) General Engineering I

LTC Stephen Gillespie (Chair), Mrs. Ashwini Mysur, Dr. Rob Curry

5) Process Modeling and Analysis

Dr. Chadwick Clark (Chair), Mr. Shashi Mysur, Dr. Steven Corns

6) Modeling and Simulation for Defense Applications

Dr. Vikram Mittal (Chair), Dr. Niki Goerger, LTC Joshua Deehr

7) Hollis Award

Dr. Kenneth McDonald (Chair), Dr. Dale Henderson, Dr. John Farr, COL (Ret) Joseph Lindquist

8) General Engineering II

Dr. Ahmed Bahabry (Chair), Dr. Sang Choi, MAJ(P) Clay Woody

9) Modeling and Simulation

MAJ Arthur Middlebrooks (Chair), Mr. William Coe, Ms. Samantha Dorminey

Roving Judges

COL Julia Coxen, COL Matthew Dabkowski, COL David Beskow, LTC Donald Koban, Dr. Anand Iyer, COL (Ret) James Schreiner, COL Matthew Jensen, LTC Trent Geisler, LTC Joseph Pedersen, Dr. Ian Kloof, Dr. Dave Hughes, Dr. Mai Tran

Track Descriptions

1) Decision Analysis

Projects that evaluate complex non-repetitive decision opportunities by examining values, uncertain variables, preferences, and alternatives.

2) Project and Engineering Management

Applications of engineering principles to operations, project management, and business practice. Presentations include engineering surrounding product development, manufacturing, construction design engineering, industrial engineering, technology, production, or any other field that employs an engineering function.

3) Systems Design for Defense Applications

Defense-related projects that feature significant levels of systems design. This includes notable examples of requirements specification, functional analysis, systems architecture, model-based systems engineering, or the use of modeling and simulation in the design process.

4) Process Modeling and Analysis

Projects that use methods and applications addressing the modeling of partially ordered activities to achieve a goal for systems existing in the real world (process analysis) or not (processing engineering), to support effective design or systems improvement.

5) Modeling and Simulation for Defense Applications

Modeling methods and applications for representing static or dynamic characteristics of systems to support effective systems design or improvement, specifically for military applications.

6) Hollis Award

The Walter W. Hollis Award's annual competition is co-sponsored by the Department of Systems Engineering and the Department of Mathematical Sciences. It recognizes excellence in military operations research and systems analysis.

7) General Engineering

Projects that apply general engineering principles and processes to meet operational needs and solve problems. Emphasis is on correctly defining requirements and then applying engineering principles to solve them.

8) Modeling and Simulation

Modeling methods and applications for representing static or dynamic characteristics of systems to support effective systems design or improvement.

Presentation Schedule

Track 1	Time: Project Name – Authors – Affiliation (* Indicates Abstract Only Submission)
<p>Decision Analysis</p> <p>Jefferson Hall Basement 002</p> <p>Chair LTC John Caddell</p> <p>CDT Moderator Ryan Li</p> <p>Judges</p> <p>Mr. Sabesan Balasundaram</p> <p>CPT Sarah Starr</p>	<p>8:45 AM: Measuring the Mission: Visualizing Officer Recruitment Progress and Performance 1 <i>Elise Bell, Ben Char, Brett Pearson, Vanessa Turner, Gerry Gonzalez, Taylor Leonard, Eric Tucker, Benjamin Kallemyn - United States Air Force Academy</i></p> <p>9:30 AM: Assessing the Impact of AI-Based Meeting Summarization on Information Relevance and Engagement 2 <i>James Spoerl, Daniel Choi, Jeremy Locklear, Henry Engler, Zachary Leith, Donal Koban - United States Military Academy</i></p> <p>10:15 AM: Generating Video and Audio Meeting Summaries Using AI 3 <i>Ian Dooley, Cameron Halligan, Samuel Hong, Daniel Kim, Khalil Mayweather, Matthew Wolfe - United States Military Academy</i></p> <p>4 11:00 AM: NO PRESENTATION</p> <p>1:00 PM: Improving Casualty Data Collection in Large-Scale Combat Operations Training 5 <i>Zachary Mansfield, Cameron Redelings, Cecilia Ollis, Jack Flowers, Yirdaw Rivera, Devon Compeau - United States Military Academy</i></p> <p>1:45 PM: Project Relay: Passing Griffin from Innovation to Sustainable Army Ownership 6 <i>Andrew Berg, Carter Hewitt, Kevin Wang, and Kathryn Dula - United States Military Academy</i></p>

Track 2	Time: Project Name – Authors – Affiliation (* Indicates Abstract Only Submission)
<p>Project & Engineering Management</p> <p>Jefferson Hall 301</p> <p>Chair Dr. Isabella Sanders</p> <p>CDT Moderator Emma Esquivel</p> <p>Judges</p> <p>Mr. Tom Coradeschi</p> <p>Dr. Kate Abel</p>	<p>8:45 AM: SPEAR–THOR AY26: Improving Recovery and Data Collection of Affordable Hypersonic Vehicles 1 <i>Austin Hernandez, Alexander Stefurak, Reagan Eastlick, and Caleb Fluker - United States Military Academy</i></p> <p>9:30 AM: Designing a Maintenance System for Agile Combat Employment: An Agile Engineering Methodology 2 <i>Max Haas, Ioan Feier, Katherine Welsh - United States Air Force Academy</i></p> <p>10:15 AM: A Mobility Analytics Framework for Pattern-of-Life Analysis 3 <i>Gabriel Dabkowski, Andrew Farrant, Patrick Lichtner, Jonathan Mallon, Haixing Yan, and Julia Coxen - United States Military Academy</i></p> <p>11:00 AM: Decision-Support Model for VA Healthcare Facility Resilience to Disaster Risk 4 <i>Mia Bonsignore, Eric Ford, Emma Lee, Elijah Pack, Sebastian Witteveld, and Caitlin Marriner - United States Military Academy</i></p> <p>1:00 PM: Probabilistic Schedule Risk Modeling and Advanced Timeline Visualization for the U.S. Military Academy’s (USMA) Academic Building Upgrade Program (ABUP) 5 <i>Georgia Brownfield, Tyler De Leon, Robert Ferris, Amy Miseli, Emma Sy, and Courtney Razon - United States Military Academy</i></p> <p>1:45 PM: Security of the United States Military Academy: A Systems-Based Approach in Assessing and Improving Campus Security Solutions Given Constraints Associated with a Limited-Access Installation 6 <i>Sarah Chernik, Lindsey Serafine, Christian Monturio, Thomas McCormack, Emmett Lilly, Noah Short, and Kenneth McDonald - United States Military Academy</i></p>

Track 3	Time: Project Name – Authors – Affiliation (* Indicates Abstract Only Submission)
<p style="text-align: center;">Systems Design for Defense Applications</p> <p style="text-align: center;">Jefferson Hall 401</p> <p style="text-align: center;">Chair COL Brandon Thompson</p> <p>CDT Moderator: John Painter</p> <p style="text-align: center;">Judges</p> <p>Mr. Matt Pierce</p> <p>Dr. Simon Goerger</p>	<p>8:45 AM: CNN-Based Acoustic Detection of Small UAS: Prototype and Field Evaluation 1 <i>Jordan Follenweider, Zachary Hanna, Loro Lado, Cameron Mock, Justin Won, and John Caddell - United States Military Academy</i></p> <p>9:30 AM: Wearable Biometrics and Shooting Performance: A Pilot Study of Readiness for Advanced Military Training 2 <i>Allison Bender, Connor Durand, Maddox Pabellon, Ethan Williamson, and David Beskow - United States Military Academy</i></p> <p>10:15 AM: Counter-UAV Model-Based Systems Engineering (MBSE) 3 <i>Micheal Mauro, Preston Halvorson, Nain Vasquez, Lucas Mowry, Carter Beck, and Stephen Gillespie - United States Military Academy</i></p> <p>11:00 AM: Driving Data Discipline: Improving Data Quality in AI2C's Centaur Application 4 <i>Marcus Sebastian, Carson Kellogg, Jared Cohen, Clayton Moorhouse, Kennison Harmon, and Matthew Dabkowski - United States Military Academy</i></p> <p>1:00 PM: Applying Systems Design to Improve Emergency Operations Center Performance 5 <i>Charles Barnett, Reese Ericson, Chadon Foreman, Thomas Konitzer, Hunter Norris, and Thomas Lainis - United States Military Academy</i></p> <p>1:45 PM: Identifying Logistics Patterns Associated with Precursor Chemical Shipments in Global Supply Chains 6 <i>Gabriel Bush, Jackson Garrett, Luke Guajardo, Nicholas Thliveris, Taylor Leonard, Gerry Gonzalez, and Benjamin Kalemyn - United States Air Force Academy</i></p>

Track 4	Time: Project Name – Authors – Affiliation (* Indicates Abstract Only Submission)
<p style="text-align: center;">General Engineering I</p> <p style="text-align: center;">Jefferson Hall 414</p> <p style="text-align: center;">Chair LTC Stephen Gillespie</p> <p style="text-align: center;">CDT Moderator Natas Coats</p> <p style="text-align: center;">Judges Mrs. Ashwini Mysur Dr. Rob Curry</p>	<p>8:45 AM: Design of a Collection Management Decision Support Tool 1 <i>Addison Ainsworth, Richard Thomas, Jacob Tuioti, Lance Dorman, Brendan Straw, and Brandon Thompson - United States Military Academy</i></p> <p>9:30 AM: Built for the User: Griffin Feature Reduction 2 <i>Adriana Frias, Grace Mumma, and Kathryn Dula - United States Military Academy</i></p> <p>10:15 AM: Applying the Systems Design Approach to a Drone-Based Blood Delivery System 3 <i>Tasha Laberge-Shusterman, Nathalia Veal, Emma Foster, Wesley Edwards, Zachary Ross, Jason Christopher, and Katherine Welsh - United States Air Force Academy</i></p> <p>4 11:00 AM: NO PRESENTATION</p> <p>1:00 PM: Modeling, Optimization, and Designing Autonomous Bridges and Rafts for Military Wet-Gap Crossings 5 <i>Alec Ells, Taylor Saulsberry, Bryson Wertz, Cooper Wilkinson, and Vikram Mittal - United States Military Academy</i></p> <p>1:45 PM: Model-Based Systems Engineering for the General Air Defense System (GADS) Interceptor 6 <i>John Choung, Soo-Ahn Kim, Mark Rybaltowski, Erin Son, Ryan Stader, and Andrew Brigman - United States Military Academy</i></p>

Track 5	Time: Project Name – Authors – Affiliation (* Indicates Abstract Only Submission)
<p>Process Modeling & Analysis</p> <p>Jefferson Hall 423</p> <p>Chair Dr. Chadwick Clark</p> <p>CDT Moderator: Elijah Melendez-Eyster</p> <p>Judges</p> <p>Mr. Shashi Mysur</p> <p>Dr. Steven Corns</p>	<p>8:45 AM: Applying Lean Six Sigma to Improve Serialized Inventory Defense Logistics 1 <i>Matthew Cavoli, Logan Dosan, Charles Farmer, Gavin Shields, Turner West, and Patrick Lupfer - United States Military Academy</i></p> <p>9:30 AM: Optimizing Air Force Officer Accessions: Integrating Cadet Preferences Across AFSC, Base, and Training Assignments 2 <i>Gershon Ellis, Katelin Marin, Luke Schlimm, Julian Whang, Benjamin Kallemyn, Taylor Leonard, and Gerry Gonzalez - United States Air Force Academy</i></p> <p>10:15 AM: Improving Non-Preventative Maintenance Efficiency at Tobyhanna Army Depot 3 <i>Joseph Dooley, Joseph Dosan, Jack Feightner, Henry Okeke, Trevor Smith, and Jeremy Schlegel - United States Military Academy</i></p> <p>11:00 AM: Lean Sigma Six: Optimize Material Utilization LD30101 Tobyhanna Army Depot 4 <i>Ethan Berginc, Terrence Carter, Lucas Kanta, Peyton Warner, Stephen Willey, and Joseph Kearney - United States Military Academy</i></p> <p>1:00 PM: Supplier Selection for Critical Minerals in Space Supply Chains* 5 <i>Kenedy Hecker, Joshua Burnett, Jacob Azizi, Evy Laursen, Gerald Burke, and Isabella Sanders - United States Military Academy</i></p> <p>1:45 PM: An Empirical Evaluation of a RAG-Enabled AI Clinical Support System for Army Sick Call: A Simulation-Based Workflow Analysis 6 <i>Kira MacMullen, Alex Zhang, Cody Bradford, Peter Segat, Elhadji Kone, and Ahmed Bahabry - United States Military Academy</i></p>

Track 6	Time: Project Name – Authors – Affiliation (* Indicates Abstract Only Submission)
<p>Modeling & Simulation for Defense Applications</p> <p>Jefferson Hall 145</p> <p>Chair Dr. Vikram Mittal</p> <p>CDT Moderator Kirstin Geczik</p> <p>Judges</p> <p>Dr. Niki Goerger</p> <p>LTC Joshua Deehr</p>	<p>8:45 AM: Modeling Ground Force Readiness in Sustainment Brigades</p> <p>1 <i>Christopher Carter, Braden Bartosh, June Lee, Bophelo Dimapo, Nicholas Pleus, and Jacob Lueders - United States Military Academy</i></p> <p>9:30 AM: Simulating Infantry Squad Counter Unmanned Aerial System Technologies to Increase Combat Effectiveness</p> <p>2 <i>John An, Sam Arnold, Ned Brady, Ty Bliss, Jack Louis, and Stephen Gillespie - United States Military Academy</i></p> <p>10:15 AM: Visualizing Performance: Communicating Performance Metrics to Improve Individual Performance and HP Forge Program Management</p> <p>3 <i>Tyler Anderson, Nikolas Badinelli, Andrew Bardak, Robert Manse, William Parker, and Thomas Lainis - United States Military Academy</i></p> <p>4 11:00 AM: NO PRESENTATION</p> <p>1:00 PM: Fueling the Fight: A Simulation-Based Assessment of Aerial Refueling Feasibility and Risk</p> <p>5 <i>Emmanuel Achesa, Carter Hudson, Jonathan Seo, Taylor Leonard, Gerry Gonzalez, and Benjamin Kallemyn - United States Air Force Academy</i></p> <p>1:45 PM: Synthetic Data Generation and Evaluation of Position, Navigation and Timing Data</p> <p>6 <i>Jack Kendrick, Joshua Hoff, Cooper Moody, Timeo Williams, Brendan Cross, Nathaniel Bastian, and Hyeyon Bastian - United States Military Academy</i></p>

Track 7	Time: Project Name – Authors – Affiliation (* Indicates Abstract Only Submission)
<p>Hollis Award</p> <p>Jefferson Hall Haig Room 6th Floor</p> <p>Chair Dr. Kenneth McDonald</p> <p>CDT Moderator Chinmay Sapute</p> <p>Judges</p> <p>Dr. Dale Henderson</p> <p>Dr. John Farr</p> <p>COL (Ret) Joseph Lindquist</p>	<p>8:45 AM: Applying Unsupervised Machine Learning to Enhance Space Domain Awareness 1 <i>Vincent Vo, Dylan Treat, Joshua Bagley, Jackson Congrove, Zachary Hruby, and Christopher Gramling - United States Military Academy</i></p> <p>9:30 AM: Drone-Augmented Ground Sensors: A Model-Based Systems Engineering Approach to Area Denial 2 <i>Benedetto Fusco, Ashley Hubert, Dan Velarde, Kathryn Wegler, Justus Whitaker, and Vikram Mittal - United States Military Academy</i></p> <p>10:15 AM: ADS-B Traffic Anomaly Detection for Geopolitical Early Warning: An STL-Based Pipeline 3 <i>Eric Dailey, Kristian Nordby, Zachary Reynolds, and David Beskow - United States Military Academy</i></p> <p>4 11:00 AM: NO PRESENTATION</p> <p>1:00 PM: Urban Environment Safe-Route Generator 5 <i>Michael Palchak, Russell Nelson, and Jessica Libertini - United States Military Academy</i></p> <p>1:45 PM: Application of a Genetic Algorithm for a Solar/Wind/Diesel/Hydro/Nuclear/Battery Microgrid for Army Installations 6 <i>Jake Moffat, Wyatt Cyprow, Sebastian English, Stuart York, Trenton Hogan, James Grymes, David Sang, Karoline Hood, Scott Kattalenich, and F. Todd Davidson - United States Military Academy</i></p>

Track 8	Time: Project Name – Authors – Affiliation (* Indicates Abstract Only Submission)
<p style="text-align: center;">General Engineering II</p> <p>Mahan Hall 427</p> <p style="text-align: center;">Chair Dr. Ahmed Bahabry</p> <p>CDT Moderator Noah Stephenson</p> <p style="text-align: center;">Judges</p> <p>Dr. Sang Choi</p> <p>MAJ (P) Clay Woody</p>	<p>1 8:45 AM: NO PRESENTATION</p> <p>9:30 AM: Design of a Tool to Reduce the Number of Preventable Doctor/Hospital Visits Experienced by Individuals with Intellectual and Developmental Disabilities (IDD) <i>William Echols, Amy Mayeaux, and Britney Orellana-Ochoa, Lance Sherry, Fahimeh Ghorbani, and Justin Amoyal - George Mason University</i></p> <p>10:15 AM: Hidden in Plain Sight: Ghost Suppliers in the UH-60 Supply Chain*</p> <p>3 <i>Harrison Faulkner, Jack Drabenstott, Zakary Sury, Kohen Rankin, Charles Britton, and Isabella Sanders - United States Military Academy</i></p> <p>11:00 AM: Creating Balanced Nursing Schedules for Medical-Surgical Units</p> <p>4 <i>Aiden Small, Austin Parker, Brock Bewley, Garrett Munoz, Kaden Alvarado, and Richard Cassady - University of Arkansas</i></p> <p>1:00 PM: Design of an Automated Floating Station-Keeping Power Line (AFSPL) for Ship-to-Shore Humanitarian Aid Delivery</p> <p>5 <i>Hocine Filali, Alan Garcia, Amr Hamza, Nesma Khalafalla, and Timothy Shipman, Lance Sherry, Fahimen Ghorbani, and Wonny Kim - George Mason University</i></p> <p>1:45 PM: Quantifying Time to Aim for Soldier Lethality</p> <p>6 <i>Dewayne Coleman, Stryker Gay, Edward Hummel, Trae McDaniel, Cooper Schodrof, and Brandon Thompson - United States Military Academy</i></p>

Track 9	Time: Project Name – Authors – Affiliation (* Indicates Abstract Only Submission)
<p>Modeling & Simulation</p> <p>Mahan Hall 415</p> <p>Chair MAJ Arthur Middlebrooks</p> <p>CDT Moderator Thomas Anderson</p> <p>Judges Mr. William Coe Ms. Samantha Dorminey</p>	<p>1 8:45 AM: NO PRESENTATION</p> <p>9:30 AM: Scenario-Based Stochastic Mixed-Integer Linear Programming for Manufacturing Footprint and Patient Access</p> <p>2 <i>Jack Lewis, Daniel Hong, Seth Chung, Benjamin Johnson, Xavier Ramos, and Ahmed Bahabry - United States Military Academy</i></p> <p>10:15 AM: Design of an Area Controller Training System (ACTS) for Faster En Route Air Traffic Controller Certification</p> <p>3 <i>Zachary Cacace, Nathanael Davis, Alana Khem, and Noran Magatheh, and Lance Sherry, Fahimeh Ghorbani, Brian Holguin - George Mason University</i></p> <p>11:00 AM: Optimizing Snowmaking Operations at Keystone Resort</p> <p>4 <i>Aden Extrand, Raymond Picard, Jared Switzer, Jacob Wielhouwer, Gerry Gonzalez, Taylor Leonard, and Benjamin Kallemyn - United States Air Force Academy</i></p> <p>1:00 PM: Modeling the Flow of Veterans Throughout the West Los Angeles Veterans Campus</p> <p>5 <i>Noah Alexander, Walker Aycock, Ryan Franco, Cole Karpinski, Marcus Lin, Robert Staring, and Chad Clark - United States Military Academy</i></p> <p>1:45 PM: Design of a Task & Parts Coordination Hub (TPCH) to Reduce Warehouse Stockouts for Municipal Water Utilities</p> <p>6 <i>Joseph Sadiq, Adewale Adekambi, and Nicholas Privitera, and Lance Sherry - George Mason University</i></p>

Awards Banquet and Keynote Speaker

Mr. Alexander Miller

Army Chief Technology Officer in the Office of the Army Chief of Staff

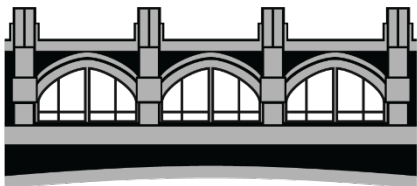


Dr. Alex Miller graduated from Purdue University in 2009 with a degree in Computer Information Technology and began his career in the Defense Industrial Base, supporting the U.S. Army before transitioning to civil service. His work has focused on delivering innovative intelligence capabilities, modernizing technology architectures, and supporting operations such as IRAQI FREEDOM, ENDURING FREEDOM, INHERENT RESOLVE, and RESOLUTE SUPPORT.

Dr. Miller has held key roles inside the Department of War, including Chief Technology Advisor for Intelligence Architecture Modernization in Afghanistan and Senior Advisor for Science and Technology to the Vice Chief of Staff of the Army. He currently serves as the Army Chief Technology Officer in the Office of the Army Chief of Staff. He holds a Master's Degree in Systems Engineering from Johns Hopkins University and a Doctor of Technology from Purdue University, with published research on biometrics, security, and blockchain technology.

Outside of work, Alex is active in his community, leading philanthropic events and participating in endurance activities such as ultra-marathons and obstacle course races.

West Point Club
West Point, New York
April 23, 2026



AT WEST POINT

**SYSTEMS
DESIGN**
AND ANALYSIS CENTER