

[illegible]

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SCHEDULE

KEY

REGISTRATION	SESSION
BREAK/MEAL	SPEAKER

	REGISTRATION	
7:30		
8:00		
9:00	MON, 7/28	TUE, 7/29
	7:30 AM	7:30 AM
10:00	-	-
	12:30 PM	12:30 PM
11:00	ESJ	ESJ
12:00		
1:00	SUN, 7/27	
2:00	12 PM	
3:00	-	
	6 PM	
4:00	KEB	
5:00		

WHERE DO I REGISTER?

SUNDAY: Kim Rotunda
MONDAY: ESJ, Ground Floor
TUESDAY: ESJ, Ground Floor

	SUNDAY, JULY 27	
12:00	Orientation & Onboarding (12-1:30 PM)	KEB
1:00	Welcome & Icebreaker (1:30-2 PM)	KEB
2:00	Workshop I (2-3:30 PM)	JMP
3:00	Ice Cream Break (3:30-3:45 PM)	JMP
4:00	Workshop II (3:45-5:15 PM)	JMP
5:00		
6:00	Engineering Tours (5:15-6:30 PM)	JMP, AJC
7:00		
8:00	Welcome Reception (6:30-8:30 PM)	AJC

AT-A-GLANCE

	MONDAY, JULY 28	
7:30	Breakfast (7:30-8:30 AM)	ESJ
8:00	& Welcome (8:15-8:30 AM)	ESJ
	Keynote I (8:30-9 AM)	ESJ
9:00	Break (9-9:15 AM)	ESJ
	WIP I & WIP II (9:15-10:30 AM)	ESJ
10:00	Break (10:30-10:45 AM)	ESJ
	Workshop III (10:45 AM-12:15 PM)	ESJ
11:00		
12:00		
	Lunch, Group Photo & Exhibits (12:15-1:45 PM)	ESJ
1:00		
	Workshop IV (1:45-3:15 PM)	ESJ
2:00		
3:00	Break (3:15-3:30 PM)	ESJ
	Full Papers I & II (3:30-4:30 PM)	ESJ
4:00		
	Panel I & Panel II (4:30-5:30 PM)	ESJ
5:00		
	Depart ESJ (5:30-6 PM)	ESJ
6:00		
7:00		
8:00	Keynote II, Reception, & Dinner (6-9 PM)	The Hall
9:00		

TUESDAY, JULY 29	
Breakfast (7:30-8:30 AM)	ESJ
GIFTS I & II (8:30-10:30 AM)	ESJ
Break (10:30-10:45 AM)	ESJ
Full Papers III & IV (10:45-11:45 AM)	ESJ
Rapporteurs, Awards, & Closing (12-12:30 PM)	ESJ
Boxed Lunches (12:30-1:30 PM)	ESJ
First-Year Admins Lunch & Optional Tours (1-2:30 PM)	The Loft, ESJ

**SCAN FOR
ABSTRACTS**



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SESSION OVERVIEW

The following pages provide the program schedule for the FYEE 2025 conference. To view the abstracts for any of the presentations, you can scan the QR code below, which will direct you to the abstract repository hosted in Google Docs.

There are four types of presentations given throughout the conference, and the sessions are facilitated so that the conference is engaging and impactful for both authors and audience members. See below for a brief description of each session type.

WORKSHOP Workshops encourage interaction between the facilitators and the attendees to help them explore solutions to challenges they face in their programs.

WIPS Work-in-progress (WIP) papers share current research and/or implementation that is not yet completed, providing authors the opportunity to engage in discussion with other conference attendees to gain feedback on their work and find potential collaborators.

WIP authors will present a 5-minute 'pitch' to audience members (separated into two rooms), before all participants are invited to discuss WIPs authors' work during a combined poster session.

FULL PAPER Full papers authors will present completed work, or work at a phase where results are available for analysis and discussion. Full paper presentations will be 12-minutes or less, with time for questions from the audience following the presentation.

GIFTS Great Ideas for Teaching, and Talking with, Students (GIFTS) papers are for authors wanting to share their best practice for teaching, advising and developing first year engineering talent.

GIFTS authors will be split into two rooms and will present a 2-minute 'pitch' to audience members. We will then allow for interactive discussion between the authors and attendees for ~30 minutes ('science-fair' style), before audience members rotate to the second GIFTS session.

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ABSTRACTS**



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TIME	EVENT	ROOM
7:30 - 8:30 AM	Breakfast	ESJ Ground Floor
8:15 - 8:30 AM	Welcome	ESJ 0224
8:30 - 9:00 AM	KEYNOTE I Darryll Pines , <i>President, University of Maryland, College Park</i>	ESJ 0224
9:00 - 9:15 AM	Break	ESJ
9:15 - 9:45 AM	WIP I Research Opportunities For Educators Who Don't Do Research <i>Todd R. Hamrick, Robin A.M. Hensel, Atheer Almasri, Carter Hulcher, Lizzie Santiago, Susie Huggins, Akua B. Oppong-Anane</i> Both Sides Now: Examining the Faculty Side of a Student Code Critiquer from a Human Factors Perspective <i>Laura Albrant, Leo C. Ureel II, Lynn A. Albers</i> First-year Student Support System: A Multi-agentic AI Approach <i>Rui Li</i> Enhancing Teaching and Learning in a First-Year Course Through the Dual Lens of Student Reflection and Feedback <i>Roshina Babu</i> Enhancing Student Collaboration Through Growth-Based Assessment Practices <i>Evelyn Walters, Laura Riggio, Cory Budischak</i> Measuring Student Engagement in Simulated Excel Instruction - Methodological Limitations and Future Directions <i>Atheer Almasri, Todd R Hamrick, Robin A.M. Hensel, Akua B. Oppong-Anane, Lizzie Santiago, Carter Hulcher</i>	ESJ 1224
	WIP II Engineering Culture: Ideologies, Mindsets, and Infrastructure <i>Timothy Duane Reedy, David Tomblin</i> Bridging Academics and Community: The Impact of Living-Learning Programs on Inclusion, Community, Leadership, and Academic Success <i>Lesly Samantha Murillo, Tabatha Cuadra Rodriguez, Paige E Smith</i>	ESJ 1202

SCHEDULE

MONDAY, JULY 28TH 2025

TIME	EVENT	ROOM
9:15 - 9:45 AM	WIP II (cont.) Fostering Engineering Communities through Collaborative, Student-Led Learning in a First-Year Intro to Engineering Course <i>Ronnie L. Brown</i> Exploring An Effective Mentorship Structure for Student Success in Higher Education <i>Olukemi Akintewe</i> Building Supportive Campus Communities Through the MakerSpace Initiative <i>David Kriesberg, Evan Hutzell, Richard Blanton</i>	ESJ 1202
9:45 - 10:30 AM	WIP I & II POSTER SESSION	ESJ Atrium Lounge
10:30 - 10:45 AM	Break	ESJ Ground Floor
10:45 - 12:15 PM	WORKSHOP III Power of Situational Judgment Tests (SJTs): Developing Stronger and More Effective Engineering Graduates (Sponsored) <i>Andrea Wright, Katie Atkins (Acuity Insights)</i> <hr/> CAD for Collaborative, Inclusive, Project-Based Learning with Onshape (Sponsored) <i>Matt Shields, McKenzie Brunelle (Onshape)</i> <hr/> From Ideas to Action: Integrating Entrepreneurial Mindset in FYE Programs <i>Kaitlin Mallouk, J. Blake Hylton, Jack Bringardner, Krista M. Kecskemety, Cassie Wallwey, Andrew Charles Bartolini</i> <hr/> Activity Centric Learning and Teaching with MATLAB - Module 1 <i>Lynn A. Albers</i>	ESJ 2204 ESJ 2208 ESJ 1202 ESJ 1224
12:15 - 1:45 PM	Lunch, Group Photo, & Focus on Exhibits	ESJ Ground Floor
1:45 - 3:15 PM	WORKSHOP IV Play as Prep Workshop: Time & Resource-Efficient Strategies for Developing Effective Undergraduate TAs of First Year Students <i>Christine Alexander</i>	ESJ 1202

SCHEDULE

MONDAY, JULY 28TH 2025

TIME	EVENT	ROOM
1:45 - 3:15 PM	WORKSHOP IV (cont.) Enhancing Transportation Design Instruction with Bentley OpenRoads (Sponsored) <i>Zack Fredin, Julie Van Portfliet (Bentley Systems)</i>	ESJ 1224
	<hr/> A Deep Dive into Leveraging AI in the classroom with Autodesk Generative Design in Fusion (Sponsored) <i>Dan Banach (Principal Customer Success Manager)</i>	ESJ 2204
3:15 - 3:30 PM	Break	ESJ Ground Floor
3:30 - 4:30 PM	FULL PAPERS I & II <u>Full Paper I:</u> Cultivating Inclusive Excellence: Peer Mentoring Programs for Minoritized Students in Engineering (Research) <i>DeAnna Katey, Terrance I Harris</i> Exploratory Look at First-Year Engineering Students Sense of Belonging and Belonging Uncertainty <i>Anne Marguerite McAlister, Benjamin Goldschneider, Lisa Lampe, David R. Gutierrez, Esther Tian, Shaylin Williams</i> Exploring the Relationship between Moral Intuitions and Ethics Education among First-Year Engineering Students in the US, Netherlands, and China <i>Aleia Frye, Scott Streiner</i> Improving Educational Equity and Outcomes in a First-Year Engineering Programming Course through a Content-and-Language Integrated Approach <i>Salome Motavas, Fatimah Mahmood</i>	ESJ 1202
	<hr/> <u>Full Paper II:</u> Paying it Forward: How Current Students Advised Future Students in an Engineering Design Course <i>Natalie C.T. Van Tyne, Benjamin Daniel Chambers, Michelle Soledad</i> Characterizing Conflicts in Student Design Teams in an Introductory Engineering Course <i>Haritha Malladi, Marcia Gail Headley, Pamela S. Lottero-Perdue</i>	ESJ 1224

SCHEDULE

MONDAY, JULY 28TH 2025

TIME	EVENT	ROOM
3:30 - 4:30 PM	FULL PAPERS I & II (<i>cont.</i>) <i>Full Paper II: (cont.)</i> Leveraging real-time testing data to assess and predict student success in a team-based first-year engineering design project <i>Matthew Patrick Paul</i>	ESJ 1224
4:30 - 5:30 PM	PANEL I A Pathway to a Successful Sabbatical as a First-Year Educator <hr/> PANEL II Student Panel: Building Community and a Strong Professional Presence as an Undergraduate Teaching Assistant	ESJ 2204 <hr/> ESJ 2208
5:30 - 6:00 PM	Depart ESJ	
6:00 - 9:00 PM	KEYNOTE II Amir Ansari , <i>Co-founder & Executive Director, xFoundry@UMD</i> Keynote Reception & Dinner	The Hall

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SCHEDULE
MONDAY, JULY 28TH 2025

TIME	EVENT	ROOM
7:30 - 8:30 AM	Breakfast	ESJ Ground Floor
8:30 - 10:30 AM	GIFTS I & II <u>GIFTS I:</u> Boosting Students Who Demonstrate Non-Thriving Characteristics Early In Semester <i>Andrew Charles Bartolini, Joseph A Lyon</i> Experiential, Research-Based Learning as part of the First-Year Innovative Research Experience's Bio Inspired Robotics Stream. <i>Lena Johnson</i> Building Empathy and Conflict Resolution Skills: A Role-Playing Activity for First-Year Engineering Faculty and Teams <i>Catherine Marie Hamel</i> S.W.O.T. Analysis: Who AM I? <i>Lynn A. Albers</i> Formative Lecture Quizzes to Help Students Improve Their Understanding <i>Kathleen A. Harper</i> A School Store to Promote Sustainability and Product Iteration in a First-Year Engineering Design Course <i>Michael Galczynski, Matthew Patrick Paul, Amy J. Karlsson</i> Time Management as a Tool in a Stress Toolkit for First-Year Engineering Students <i>Laura Ann Gelles, Laura Knight, Darren K Maczka</i> A CHEESE-Y Approach to Safety <i>Dagan Trnka, Ali N Stocks</i> A Chemical Engineering Module About Coffee <i>Kurt Rhoads, Kathleen A Harper, Heidi B. Martin, Michael William Butler</i> Role-playing in Service of Developing Psychological Safety in Teams <i>Mirna Mattjik, Michelle Marincel Payne</i> Building Community and Campus Awareness with Photo Scavenger Hunts for First-Year Engineers <i>Rebecca Kiriazes</i>	ESJ 1202

SCHEDULE

TUESDAY, JULY 29TH 2025

TIME	EVENT	ROOM
8:30 - 10:30 AM	GIFTS I & II (cont.) <i>GIFTS I:</i> (cont.) Quick Assessment of Course Topics' Impact in First-Year Engineering Seminars <i>Lee Kemp Ryneason</i> Balance Builders: Stirring Together Community, Conversations, and Culinary Metaphors for Wellness in First-Year Engineering Students <i>Madison Seckman, Alison West</i>	ESJ 1202
	<hr/> <i>GIFTS II:</i> Data Driven Design: A Two Course Sequence for First Year Engineers <i>Philip Reid Brown, Ashley Joyce Mont, Katie Barillas</i> Automated Quiz Generation Using Generative AI and QTI for Teaching Content Management Systems <i>Osman Sayginer, Cory Budischak</i> Bridging Engineering Education with a Cost-Effective Classroom Kit: A Hands-On Approach to Active Learning <i>Osman Sayginer, Cory Budischak, Laura Riggio</i> Using Robotic Arm Project to Introduce Students to Engineering Design Through Experiential Learning <i>Patrick Thornton, Jaskirat Sodhi, Ashish D. Borgaonkar</i> Math Quest: Arithmetic Education for Underfunded Schools <i>Ryan McAfee Grudell, Mark Mintzlaff, Ethan Berei, Grace Lawson</i> Designing for Daily Life: Open-Ended 3D Modeling in First Year Engineering <i>Ashley Joyce Mont, Philip Reid Brown, Katie Barillas</i> Building a comprehensive First-Year Computing Trajectory <i>Joseph A Lyon, Andrew Charles Bartolini</i> Using Hardware in an Engineering Mechanics Course <i>Aris Cleanthous</i> Bridging Code and Circuit: MATLAB-Guided Arduino Walkthroughs for First-Year Engineering Students <i>Dante Charles Scalf, Turner Marks, Kathryn Schulte Grahame, Leila Keyvani</i>	ESJ 1224

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TUESDAY, JULY 29TH 2025

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TIME	EVENT	ROOM
11:45 - 12:00 PM	Break	ESJ
12:00 - 12:30 PM	Rapporteurs, Awards, & Closing	ESJ 0224
12:30 - 1:30 PM	Boxed Lunches	ESJ
1:00 - 2:30 PM	First-Year Admins Lunch Optional Tours UMD Traditions Engineering Labs: Neutral Buoyancy Tank (NBT), Wind Tunnel	The Loft (ESJ 2101) Meet at ESJ Ground Floor

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