

ASEE Rocky Mountain Section Conference 2025

May 14-16, 2025 at the University of Colorado Boulder

Conference Registration - Outside KOBL 352

Wednesday May 14				
8:30 AM Breakfast 8:30 - 9:00AM outside ECCS 201				
Wednesday, 5/14/2025, 9:00 - 10:30AM				
9:00 AM	Session 1A (ECCS 201)	#77 Coding with AI: The Future of Software Development in the Age of Intelligence	Lightning Talk	Mr. Ivan Portilla
		#73 Discussing AI: Patterns of Classroom Collaboration	Paper	Dr. Katherine Nielsen
		#46 Methodological Foundations for AI-Driven Survey Question Generation	Presentation	Mr. Ted Mburu, Ms. Kangxuan Rong, Dr. Campbell McColley, Dr. Alexandra Werth
		#44 Transcription-Enhanced AI Code Review for Deeper Learning	Lightning Talk	Mr. Nathan Whittenburg, Mr. Bobby Hodgkinson
		#39 AI-Driven Concept Assessment Framework and Application in Aerospace Engineering Sophomore Lab	Paper	Dr. Chloe Long, Mr. Bobby Hodgkinson
		#95 Igniting Entrepreneurial Mindsets through AI-Assisted STEAM Content Creation Using Camtasia	Paper	Dr. John M. Santiago, Jr.
10:30 AM Break and Refreshments, 10:30 - 10:45AM outside ECCS 201				
Wednesday, 5/14/2024, 10:45AM - 12:30PM				
10:45 AM	Panel (ECCS 201)	Panel Discussion Moderated by: Rebecca Ann Machen (CU Boulder)	Panel	Mr. Carter Moulton (Colorado School of Mines), Joseph Brown (Colorado State University), Lexi Schlosser (University of Denver), Alex McDaniel & Jeff Loats (Metropolitan State University of Denver), Molly Jameson (University of Northern Colorado), Sriram Sankaranarayanan & Diane Siber & Thomas Breideband (CU Boulder), Ram Krishnamurthy (MathWorks)
12:00 PM	Panel (ECCS 201)	Panel Q&A Facilitated by: Dr. Jeremy Koch & Mr. Bobby Hodgkinson (CU Boulder)	Panel	
12:30 PM Continuing the Conversation w/ Panelists Lunch, 12:30 - 2:00PM in KOBL 352				
Wednesday, 5/14/2024, 2:00 - 3:30PM				
2:00 PM	Session 2A (KOBL 125)	#48 Communicating AI Use in Your Course: A Policy Design Workshop	Workshop	Mr. Dillon Gidcumb, Ms. Kayla Kohake, Ms. Feliz Luna
	Session 2B (BOLD Center)	#48 Building Community and Student Success Strategies in the BOLD Center	Workshop	Ms. Amy Moreno Sherwood, Mrs. Marlene Goldman Ms. Chantal Baca
3:30 PM Break and Refreshments, 3:30-3:45PM outside ECCS 201				
Wednesday, 5/14/2025, 3:45 - 4:45PM				
3:45 PM	Session 3 (KOBL 352)	Mathworks - Accessible AI Tools for Educators and Students with MATLAB	Workshop	Dr. Jon Loftin
4:45 PM Welcome Mixer & Refreshments, 4:45 - 6:15PM in ECCS 201 and surrounding areas				
5:15 PM Keynote # 1 Becky Komarek in ECCS 201				

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Thursday May 15

8:00 AM		Breakfast 8:00 - 10:00AM in ECCS 201 and surrounding areas			
8:30 AM		Welcome by Dr. Keith Molenaar, Dean of College of Engineering and Applied Sciences in ECCS 201			
9:00 AM		Keynote # 2 Doug Melton in ECCS 201			
		Thursday, 5/15/2025, 10:00 - 11:45AM			
10:00 AM	Session 4A (ECCS 201)	#47 Instructor Gender Effects on Teamwork Experience Among Female Students in a First Year Engineering Projects Course	Paper	Dr. Angela Bielefeldt, Dr. Malinda Zarske	
		#59 Mixed Methods Assessment of First-Year Bridge Program at “Western Teaching University”	Paper	Dr. Randy Hurd, Mr. Sulabh Khadka, Dr. Dustin Grote	
		#75 First-year Engineering Seminars Abroad: Creating community for incoming engineering students	Presentation	Dr. German Parada	
		#53 Publishing with Teach Engineering: A Guide for Engineering Educators to Share Their Resources	Lightning Talk	Ms. Ellen Parrish, Ms. Jennifer Kracha	
		#56 Bringing Engineering into STEM Classrooms with Teach Engineering	Lightning Talk	Ms. Ellen Parrish, Ms. Jennifer Kracha	
		#76 Using Student Posters to Investigate the Impact of Inquiry-Based STEM Learning on Rural K-12 Students	Paper	Mr. Alexander Aronov, Dr. Daniel Knight, Dr. Angela Bielefeldt, Dr. Joseph Polman, Ms. Fabiola Palomar	
		#70 The Gift of Zero	Presentation	Ms. Sarah Maud	
		#62 Work In Progress: Engineering Student Success — Key Takeaways from the DeID Scholars Program	Paper	Mr. Abdirahman Abdi, Mr. Phil Courey, Dr. Malinda Zarske	
		#15 Beyond Affirmative Action: Can Performance-Based Admissions Boost Diversity in STEM?	Paper	Ms. Abigail Rose	
	Session 4B (KOBL 225)	#42 Using Interactive Visualizations to Enhance Your Lectures and Help Students Overcome Misconceptions	Workshop	Prof. Susan Reynolds, Dr. Dan Baker	
	Session 4C (KOBL 125)	#57 Curiosity, Connections, and Creating Value: Leveraging the KEEN Framework in Undergraduate Mathematics Teaching	Workshop	Dr. Wojciech Kossek, Dr. Stephanie Salomone	
	Session 4D (KOBL 123)	#21 Creative Learning through Maker Activities	Workshop	Dr. Pinar Omur-Ozbek	
11:30 AM		Lunch 11:30AM - 1:00PM in ECCS 201 and surrounding areas			
12:00 PM		Keynote # 3 William Kuskin in ECCS 201			

Thursday, 5/15/2025, 1:00 - 2:45PM

1:00 PM

Session 5A (ECCS 201)	#7 Exploring Circuit Education for Early Learners	Paper	Ms. Ruhan Yang, Dr. Ellen Do
	#6 Introducing Engineering Design to Fifth Graders: An Interactive Learning Activity	Presentation	Dr. Pinar Omur-Ozbek
	#66 Introductory Robotics Workshop Development: Building Critical Skills Across Disciplines	Presentation	Mr. Whit Whittall, Prof. Barbra Sobhani, Mr. Kailen Sammons
	#55 Student Insights on an Interdisciplinary Engineering Capstone Project with a Clear Client-Customer Relationship	Paper	Ms. Abigail Neering, Mr. Mitchell Keck, Ms. Julia Reyna, Ms. Natcin Sorensen, Dr. Travis Price, Dr. Randy Hurd
	#80 All of Capstone in a Day Project	Paper	Prof. Eric Bogatin, Mr. John Lettang
	#26 Customized Learning Solution in Capstone Design Project on Plastic Pollution	Lightning Talk	Prof. Sung Hee Joo, Dr. Katrina Knauer, Dr. Bryon Donohoe
	#90 A Student Perspective on Learning through UAV Design in an Engineering Capstone Project	Paper	Mr. Pedro Cupertino, Mr. Anubhav Pant, Mr. Yuto Minami, Ms. Ami Goto, Mr. Kubeshavarsha Kalithasan, Dr. Adam Lynch
	#22 Quantum Computing Conceptual Survey: Results from 3 semesters of pilot data collection	Presentation	Ms. Josephine Meyer, Dr. Gina Passante, Dr. Steven Pollock, Dr. Bethany Wilcox
	#31 Learning about Ethics and Equity in Engineering: Experience of Early-Career Engineers	Paper	Ms. Chika Winnifred Agha, Prof. Rebecca Atadero, Dr. Amir Hedayati Mehdiabadi
Session 5B (KOB L 352)	#50 Empowering Minds through Photovoice: An Art-based Approach to Cultivating Entrepreneurial Mindset and Shared Values	Workshop	Dr. Shukufe Rahman, Dr. Bhavana Kotla, Dr. Adam Carberry
Session 5C (KOB L 125)	#86 Empowering Educators: Critical Teaching Behaviors for Teaching Excellence	Workshop	Dr. Preeti Mahaveer Jagadev
Session 5D (KOB L 123)	#94 Alternative Grading Strategies in Engineering Education	Workshop	Dr. Jeremy Koch, Dr. Katherine Ramos, Dr. Novella Keeling
Session 5E (KOB L 225)	#79 Teaching Engineering Students with Different Neurotypes: Strategies for Engaging and Effective Education	Workshop	Dr. Azadeh Bolhari, Dr. Angela Bielfeldt

2:45 PM

Break & Refreshments 2:45 - 3:00PM outside ECCS 201

Thursday, 5/15/2025, 3:00 - 4:45PM

3:00 PM

Session 6A (ECCS 201)	#60 Art in Engineering as Open Pedagogy	Presentation	Prof. Jean Hertzberg
	#40 Student Intuitions of Torque as Proprioception	Presentation	Mr. Joseph Coughlin, Dr. David Mays, Dr. Heather Johnson
	#63 Integrating Finite Element Analysis and Computational Fluid Dynamics as Learning Tools in Undergraduate Engineering Courses	Presentation	Dr. Mike Soltys
	#69 Decision Quality for an Electromechanical Startup	Paper	Mr. Sivaganeshwar Subramaniam, Dr. Adam Lynch
	#2 Systems Engineering Digital Transformation Plan Using NIST CSF, CISCO and VEE Model	Paper	Mr. Ameya Shah, Dr. Adam Lynch, Mr. Duy Bui
	#74 Optimizing Manufacturing Efficiency through 5S Implementation	Paper	Mr. Thulana Delana Mudiyansele, Mr. Pedro Cupertino, Dr. Adam Lynch
	#27 Interdiffusion of Mathematics and Materials Engineering: Co-Teaching with Impact	Paper	Dr. Maila Hallare, Dr. Tanjore Jayaraman
	#18 Precision in Focus: Navigating Pallet Positioning Challenges in Aerospace Manufacturing	Paper	Ms. Rachel Cloud, Mr. Spencer MacLaughlin, Dr. Adam Lynch, Mr. Ridge Towner
Session 6B (KOB 352)	#13 360 Video: Bring the World into your Classroom	Workshop	Mr. Pat Clark
Session 6C (KOB 125)	#85 Disrupting Teacher-Centered STEM Pedagogies to Nurture STEM Identities	Workshop	Ms. Loraine Glidewell, Mr. Peter Karanevich
Session 6D (KOB 123)	#14 Art & Science and Fun & Learning, All Side by Side	Workshop	Vianney Aguilar-Chavez, Prof. Beth Osnes-Stoedefalke, Dr. Chelsea Hackett

4:45 PM

Poster Session 4:45 - 5:45PM in areas surrounding KOB 352

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Friday May 16

8:15 AM

Breakfast 8:15 - 10:00AM in ECCS 201 and surrounding areas

9:00 AM

Keynote Speaker # 4 Kathryn "Katie" Johnson in ECCS 201

Friday, 5/16/2024, 10:00 - 11:30AM

10:00 AM

Session 7A (ECCS 201)	#51 Exploring Professor Motivations and Implementations of a Real-World Problem-Solving Project: A Case Study in Preparing Students for the Emerging Building Science Industry	Paper	Mr. Benjamin Bruxvoort, Dr. Nehemiah Emaikwu, Dr. Kim Trenbath, Mr. Jason Schmidt
	#93 Mixed Reality in Construction Engineering Management Education	Lightning Talk	Dr. Steven Ayer
	#84 Incomplete Workbook Strategy in Civil Engineering Classes	Paper	Dr. Pyo-Yoon Hong
	#5 Engaging Environmental Engineering Students Through a Maker Activity on Mass Balance Concepts	Presentation	Dr. Pinar Omur-Ozbek
	#49 New Mastery-Based Process Safety Engineering Course Applies Class Learning to Individual Semester-Long Case Studies	Lightning Talk	Dr. Wendy Young
	#23 Can studio-style instruction promote the application of engineering principles in biomedical problem solving. Analysis of type 1 diabetes treatment designs submitted by biomedical engineering students in their sophomore and junior year studio.	Paper	Dr. Mridusmita Saikia ¹ , Dr. Stephanie Fuchs
	#72 Developing Innovative Projects to Engage Engineering Students in Computing	Lightning Talk	Prof. Julie Jarzemsky
	#65 Reframing Engineering & Science Education: A Case Study of CU Boulder's Online Master's Programs on Coursera	Presentation	Ms. Shane Hua, Ms. Erica Reid, Ms. Carly Morse, Ms. Emily Musumecchi, Ms. Layne Williams
Session 7B (KOBL 225)	#38 Fostering Faculty Learning Communities Focused on Teaching	Workshop	Dr. Katherine Goodman, Ms. Susan Stirrup
Session 7C (KOBL 125)	#52 Workshop: Data-driven pedagogical techniques and resources to increase student engagement and sense of belonging in large courses	Workshop	Dr. Warren Sconiers, Dr. Alexa Clemmons, Dr. Kelly Gildersleeve, Dr. Kalpana Gupta, Dr. Melanie Pepper, Ms. Baylee Edwards, Dr. Maryrose Weatherton
Session 7D (KOBL 123)	#68 Pre-College Environmental Explorations Using NASA-Funded Aerokats and Rover Education Network (AREN) Technology	Workshop	Ms. Jennifer Taylor, Ms. Keriann Jacobson

Friday, 5/16/2025, 11:30AM - 12:30PM

12:05 AM

**Session 8
(KOBL 352)**

Mathworks - Introduction to Internet of Things: Hands-On Workshop

Workshop

Mr. Jacob George, Dr. Jon Loftin, Mr. Ram Krishnamurthy

1:15 PM

RMS Business Meeting 1:15 - 2:00PM in KOBL 352