Computers in Education Division (CoED) / ASEE 2026 · Charlotte, NC

Tracks, Posters & Best of CoED

The full technical program by thematic track, the Best of CoED paper session, and every poster in the Division poster session.

3	6	26	4
THEMATIC TRACKS	POSTER THEMES	POSTERS	BEST-OF PAPERS

Technical Sessions by Track

26 sessions · 103 papers

A AI in Education

TOOLS, TUTORS, CURRICULUM & REFLECTION
9 sessions

M308A MON · 11:00 AM
Faculty AI Policies and Ethical Practice
CCC · E-220BC · 4 papers · Mod. Tejal Mulay

M408A MON · 1:30 PM
AI Companions and Tutors for Learning
CCC · W-207BC · 3 papers · Mod. Carlotta A. Berry

M508B MON · 3:15 PM
AI-Augmented Software Engineering Practice
CCC · E-220BC · 4 papers · Mod. Mattox Beckman

T308A TUE · 11:00 AM
AI in Engineering Curriculum and Course Integration
CCC · W-207BC · 4 papers · Mod. Shilpa Gupta

T408C TUE · 1:30 PM
Active Learning, Engagement, and Learning Assistants
CCC · W-205B · 4 papers · Mod. Diley Hernandez

T508A TUE · 3:15 PM
AI Agents, Multi-Agent Systems, and Conversational Tools
CCC · W-205B · 4 papers · Mod. Kamalamalini Nagasundaram

W108B WED · 8:00 AM
Learning Analytics, Networks, and Predictive Models
WC · Kings · 5 papers · Mod. Walter Schilling

W308 WED · 11:30 AM
Curriculum, Workforce, and Emerging Computing Topics
WC · Independence · 4 papers · Mod. Mehdi Mekni

W408 WED · 2:00 PM
Generative AI Across the Curriculum: Practice and Reflection
WC · Harris · 4 papers · Mod. Keith Hekman

B Learning, Engagement & Inclusion

STUDENT OUTCOMES, EQUITY & MODALITIES
9 sessions

M308B MON · 11:00 AM
Student Use and Perceptions of Generative AI
CCC · E-220A · 4 papers · Mod. Menaka Abraham

M408B MON · 1:30 PM
AI for Assessment, Grading, and Feedback
CCC · E-220BC · 4 papers · Mod. Kamalamalini Nagasundaram

M508A MON · 3:15 PM
Peer Engagement and Help-Seeking in Introductory Computing
CCC · E-220A · 4 papers · Mod. Brian Fiegel

T208 TUE · 9:15 AM
Equity, Accessibility, and Neurodiverse Learners
CCC · W-207BC · 4 papers · Mod. Joshua Hertz

T308B TUE · 11:00 AM
AI Literacy and K-12 AI Education
CCC · W-201C · 4 papers · Mod. Chris Bourke

T408A TUE · 1:30 PM
Robotics and Embodied Learning
CCC · W-201A · 4 papers · Mod. Ivan Abraham

T508B TUE · 3:15 PM
Spatial Skills, Embodied Cognition, and Multimodal Sensing
CCC · W-207BC · 4 papers · Mod. Benjamin E Chaback

W108 WED · 8:00 AM
Programming Misconceptions and Conceptual Understanding
WC · Queens · 4 papers · Mod. Mattox Beckman

W308B WED · 11:30 AM
Project-Based and Practicum-Style Learning
WC · Harris · 4 papers · Mod. Carlotta A. Berry

C Computing Pedagogy & Methods

FOUNDATIONS, PRACTICE & SYNTHESIS
8 sessions

M308C MON · 11:00 AM
Course Design and Engagement in Introductory Computing
CCC · W-207BC · 4 papers · Mod. Ivan Abraham

M408C MON · 1:30 PM
Cybersecurity Education
CCC · E-220A · 4 papers · Mod. Matthew Fendt

M508C MON · 3:15 PM
Gamification and Game-Based Learning in Computing
CCC · W-207BC · 4 papers · Mod. Akshay Mathur

T308C TUE · 11:00 AM
Computational Thinking and CS Pedagogy
CCC · W-201A · 4 papers · Mod. Matthew Fendt

T408B TUE · 1:30 PM
Virtual Reality for Engineering and Lab Training
CCC · W-207BC · 4 papers · Mod. Tejal Mulay

T508C TUE · 3:15 PM
Frameworks, Acceptance, and Scoping Reviews in Computing Education
CCC · W-201D · 4 papers · Mod. Lawrence Whitman

W408B WED · 2:00 PM
Educational Apps, Tools, and Frameworks
CCC · E-212B · 4 papers · Mod. Benjamin E Chaback

W508 WED · 3:45 PM
Reviews, Synthesis, and Future Directions
CCC · E-212B · 3 papers · Mod. Benjamin E Chaback

DIVISION SPECIAL EVENT · HONORS

Best of CoED Paper Session

Monday, Jun 22 · 3:15 PM – 4:45 PM · M508D · W-209B · Moderator Jean Mohammadi-Aragh

★ **Teaching Floating-Point Representation with an 8-Bit Format: The One-Byte Float Approach**
John K. Estell, Ian Meyer Kropp, Stephany Coffman-Wolph

★ **Quantum AI for Engineering Education: Assessment of Students' Problem-Solving Performance in Electric Circuits**
Oenardi Lawanto, Wade H Goodridge, sehrish jabeen, Zain ul Abideen, Rifatul Islam Himel, Yashin Brijmohan

★ **Students' Critical Thinking Conceptions as Predictors of Skill Development in Computer Engineering Capstone Courses**
Trinidad Sofia Balart, Gibin Raju, Kristi J. Shryock

★ **AI-Assisted Machine Learning Result Interpretation: Effects on Student Learning and Confidence in an Undergraduate ML Course**
Vinod Kumar Ahuja

CoED Poster Session

26 posters

Monday, Jun 22 · 9:15 AM – 10:45 AM · Hall A (Exhibit Hall BC) · Judged for the Woody Everett Award · board numbers shown at left

AI TOOLS AND CHATBOTS IN EDUCATION

81 WIP: A Virtual Teaching Assistant to Engage in Effective Pedagogical Methods — Jonathan Steffens

82 WIP: AI-Powered Knowledge Graph System for Personalized SQL Learning and Adaptive Feedback in Database Systems Education — Dylan Dunham

83 WIP: Autoethnography Assistant: An AI interview tool to support qualitative inquiry. — Leo C. Ureel II

89 WIP: Low Effort, High Grades? Benchmarking LLMs on Various Engineering Assignments — Yuxuan Chen

95 Work in Progress: Beyond Words – A Multimodal AI Coaching Tool to Enhance Communication Skill Development in Engineering Education — Guang Yang

96 Work in Progress: From Textbooks to Interactive Visualization – 3D STEMulate: An AI-Powered Platform for STEM Education — Hamid S Timorabadi

97 Work in Progress: GUIDE—An AI-Powered Co-Pilot for Student Academic Pathways in Engineering — Zhuo Zhang

GENERATIVE AI IN CS AND ENGINEERING COURSEWORK

79 Effective Use of Generative AI for Reducing Knowledge Gap — Se Jeong Yang

84 WIP: Diagnosing CS1 Misconceptions with LLMs: A Pilot Study on Alignment, Variability, and Prompt Sensitivity — Kamalamalini Nagasundaram

86 WIP: From Proofs to Programs - Integrating GenAI and Interactive Applets in Graduate Control Theory Course — Ivan Abraham

101 Work-in-Progress: Investigating Novice End-User Programmers' Problem-Solving Through Student–GenAI Interaction Patterns — Fadhla Binti Junus

102 [Work-in-Progress] The Impacts of Students' GenAI Interactions on Their Social and Psychological Dynamics: Preliminary Findings from a Systematic Review in Engineering and Computing Education — Eunsil Lee

COMPUTATIONAL THINKING AND K-12 COMPUTING

91 WIP: SnapBots: Fostering Collaborative and Accessible Computational Thinking Education for Elementary and Middle School Students by Programming with Pencil and Paper — Duncan Johnson

92 WIP: The Influence of Block and Text Coding Interventions on Computational Thinking in Undergraduate Computer Science Students — Daniel W. Burleson

100 Work-In-Progress: Designing Curricular Materials to Support Teacher Learning for Interdisciplinary Computer Science Education — Shannon Gooden Davidson

EMBEDDED SYSTEMS AND ROBOTICS EDUCATION

88 WIP: Leveraging Embedded Systems and Edge Intelligence to Enhance High-schoolers' Conceptual Change about AI — Woorin Hwang

90 WIP: Sim-to-Real Quadruped Robotics with Scaffolded Lab Modules for Motion, Perception, and Multi-Robot Coordination — Chinmay Dhanraj Nehate

COURSE DESIGN, PEDAGOGY, AND HANDS-ON LEARNING

78 Annotators Increased Research Career Interest After Participating in Human Labeling Tasks for AI/ML Research — Teresa Angelie Myrthil

80 WiP : Comparing Programming Interest/Perceptions with Cornerstone Project Modifications — James E. Lewis

85 WIP: From Curiosity to Impact - A Pedagogical Framework for Research-Based Learning in Computer Science — Raghavi Sakpal

87 WIP: Insights From Improving Student Outcomes in a Small Class Using Oral Exams and Other Student Engagement Techniques — Matthew Fendt

94 Work In Progress - Empowering Undergraduates with Virtual Labs: Interactive Learning of Core Engineering Principles using Ansys Discovery — Kaitlin Tyler

98 Work in Progress: Identifying and Sharpening Student's Conceptions of Induction in a Coursework Context — Nirvaan Khera

ASSESSMENT AND COGNITIVE ENGAGEMENT

93 WIP: Tracking Cognitive Engagement via Micro-Facial Expressions during Engineering Problem-Solving — Talha Naqash

99 Work-In-Progress: A Scoping Review of Factors Influencing the Success of Digital Games in Engineering Education — Tristan Letizia

103 Work-in-Progress: An Investigation into the Benefits of Tagged Assessment Scores — Robert M Nickel