

SIG 27 CONFERENCE 2024 - FULL PROGRAM



Day 1 – Monday 25.11.

8:30-9:15	Registration starts		
9:15-10:15	Conference opening & Panel Discussion (Room EL6) <i>GenAI and its impact on applied use of insights from online process measures of learning</i> Chair: Kshitij Sharma/Michalis Giannakos Sanna Järvelä, Roger Azevedo, Halszka Jarodzka		
10:15-10:30	Coffee break		
10:30-11:45	Keynote (Room EL6) Tamara Van Gog <i>The biopsychosocial model of challenge and threat in research on learning and instruction</i>		
11:45-13:00	Lunch break		
13:00-14:30	Roundtable 1 (Room EL2) Chair: Tiina Törmänen Zaibei Li <i>Enhancing Group Work Understanding in Science Education through MMLA</i> Annamarie Brosnihan <i>Multimodal data for evaluating team leaders' emotion regulation during medical emergency simulations</i> Héctor J. Pijeira-Díaz <i>The arousal footprint of self-regulated learning: Theoretically underpinning physiological measures</i> Jannick Illmann <i>How can log data contribute to measuring skills in the critical use of online information?</i>	Roundtable 2 (Room EL3) Chair: Muhterem Dindar Erika Schlatter <i>Adaptivity for vocabulary learning in immersive virtual reality</i> Susanne Staufer <i>Weighting of Questionnaire Data and Learning Analytics to Generate Learning Paths</i> Carolin Hahnel <i>Validating the interpretation of process indicators of multiple document reading</i> Charlotte Van Tricht <i>Processing Online Feedback Reports: A Mixed Method Study on Self-Efficacy and Attributions</i>	
14:30-15:00	Coffee break		
15:00-16:30	Paper session (Room EL3): Physiological data Chair: Tiina Törmänen Elizabeth Cloude <i>Synchrony between multiple affect signals and game-based learning outcomes</i>	Paper session (Room EL2): Eye-tracking Chair: Carolien Knoop-van Campen Halszka Maria Jarodzka <i>The Impact of Decorative Images on Digital Testing</i> Florian Hauser	Paper session (Room EL6): Trace data Chair: Inti Bistolfi Daryn Dever <i>Exploring the Use of Complexity Science for Revealing Emergent</i>

	<p>Elina E. Ketonen <i>Using physiological online measures to examine measurement reactivity to experience sampling</i></p> <p>Elizabeth Cloude <i>Emotional cohesion and collaborative problem-solving between competitive and non-competitive teams</i></p> <p>Christian Schons <i>How do trait and state mathematics anxiety affect performance? An analysis with EDA and eye-tracking</i></p>	<p><i>Eye movement modeling examples in software engineering - The expert's view</i></p> <p>Ellen Kok <i>Eye read you! How gaze displays of reading strategies can inform teachers' reading instruction</i></p> <p>Carolien Knoop-van Campen <i>Reading strategies in poor decoders: a webcam-based eye-tracking study</i></p>	<p><i>Learning Processes via Trace Data</i></p> <p>Hannah Deininger <i>What helps you? Individual differences in which learning behaviors are relevant for achievement</i></p> <p>Christin Lotz <i>Exploration of behavior sequences for successful complex problem solving using n-grams</i></p> <p>Marijn Gijsen <i>Between Pixels and Paper</i></p>
16:45-18:45	<p>Poster session Place: Elektrobygget Galary Chair: Kshitij Sharma</p> <p>Anceli Kaveri <i>How students' self-efficacy and data-literacy relate to perceived support from learning analytics?</i></p> <p>Saeed Ahmad <i>Evaluating the Impact of Authentic Learning on Student Competencies in Public Health</i></p> <p>Florian Berens <i>Does TPACK-oriented teacher training change how teachers use an ITS? Learning Analytics on an RCT</i></p> <p>Vijay Venu Vadlamudi <i>Quantifying the impact of student-active learning through feedback collection</i></p> <p>Gabrielle Hansen <i>Student progress in self-paced mastery learning with transparent tests</i></p> <p>Mottok Jürgen <i>An Educational Perspective on Eye Tracking in Engineering Sciences</i></p> <p>Norbert Erdmann <i>Primary school students' online inquiry behaviour- what does log data indicate?</i></p> <p>Yasuhisa Kato <i>Improving Online Learning: Outcomes of a Redesigned Academic Literacy Course for First-Year Student</i></p> <p>Ronja Schiller <i>A Process-oriented Approach to Understand Effects of Automated Feedback using Keystroke Logging</i></p> <p>Rick Hankel <i>From Surface to Depth: The Impact of Reflective Questions on Student Learning</i></p> <p>Yi-Lun Jheng <i>Beyond the Post-Survey: A Dynamic Approach to Measure Epistemic Emotions in Reading Refutation Texts</i></p> <p>Lonneke Boels <i>Eye-tracking students' interpretations of statistical graphs with webcams</i></p> <p>Rachelle Esterhazy <i>Multimodal learning analytics to explore key moments of interdisciplinary knowledge-construction</i></p>		

	<p>Moritz Niemann <i>Triangulating (un)successful learning at the process level using multimodal data</i></p> <p>Floris Kervers <i>Using Interactive Documents to Enhance Active Learning for Higher Education Students</i></p> <p>Senne Van Hoecke <i>Mapping the classroom: Categorizing 'classroom activities' to improve classroom management training</i></p> <p>Marcus Schrickel <i>Identifying Behavioral Patterns of Knowledge Acquisition in Technical Problem Solving</i></p> <p>Nina Vandermeulen & Mariëlle Leijten <i>Enhancing writing process insights with feedback based on keystroke logging</i></p>
20:00	<p>Welcoming reception Rockheim Museum</p>

Day 2 – Tuesday 26.11.

9:00-10:15	<p style="text-align: center;">Symposium (Room EL2): Measuring Learning Processes with Trace Data Through a Complexity Science Lens Organiser: Elizabeth Cloude & Laura Allen Chair: Daryn Dever Discussant: Roger Azevedo</p> <p>Megan Wiedbusch <i>The emergence of metacognition in a teamwork competency framework: Complexity through multimodality</i></p> <p>Oleksandra Poquet <i>Adding levels and timescales to clicks and constructs: A systematic review</i></p> <p>Muhterem Dindar <i>Understanding lesson enjoyment in Zoom lessons through teacher-student physiological synchrony</i></p>	<p style="text-align: center;">JURE invited symposium (Room EL6): Capturing CAMM processes with online measures of learning Organiser: Tiina Törmänen Chair: Tiina Törmänen Discussant: Márta Sobocinski</p> <p>Inti Bistolfi <i>Exploring Automated Real-Time Self-Regulated Learning Detection in Essay Texts</i></p> <p>Niina Palmu <i>Affective states, goal management, and collaboration assessment in relation with socially shared regulation of learning in workplace teams</i></p> <p>Miriam Wunsch, Ji-Young Min <i>Relation between Physiological and Self-Report Measures of Achievement Emotions – A Psychometric Network Approach</i></p>	
10:15-10:30	Coffee break		
10:30-11:45	<p style="text-align: center;">Keynote (Room EL6) Olga Viberg <i>Cultivating Trust and Values in the Era of AI-Powered Education</i></p>		
11:45-13:00	Lunch break		
13:00-14:00	SIG 27 Business meeting (Room EL6)		
14:00-14:15	Coffee break		
14:15-16:00	<p>Paper session (Room EL3): Team learning Chair: Rachelle Esterhazy</p> <p>Hanna Järvenoja <i>Examining Groups' Motivation Regulation in Collaborative Learning: A Multi-Method Approach</i></p> <p>Rogers Kaliisa <i>The temporality of epistemic, procedural, and social dynamics in collaborative problem-solving</i></p> <p>Marcella Hoogeboom <i>Advancing team collaboration and learning research through multichannel work? A roadmap and showcase</i></p> <p>Anni-Sofia Roberts</p>	<p>Symposium (Room EL2): Application of online measures to investigate collaborative learning Organiser: Kshitij Sharma & Steffi Sassenus Chair: Saswati Chaudhuri Discussant: Muhterem Dindar</p> <p>Kshitij Sharma <i>Measuring togetherness in pair programming: a multimodal learning analytics approach</i></p> <p>Saswati Chaudhuri <i>Student joint visual attention in collaborative problem-solving task associated with social skills</i></p> <p>Steffi Sassenus <i>When teams adapt: Constructing four</i></p>	<p>Paper session (Room EL6): Physiological data Chair: Héctor J. Pijeira-Díaz</p> <p>Márta Sobocinski <i>Physiological Traces of Learners' Help-Seeking and Tutor Support in Immersive VR Environments</i></p> <p>Reito Visajaani Salonen <i>Physiological Synchrony in Interpersonal Agency: Case Study of Collaborative Problem Solving</i></p> <p>Tiina Törmänen <i>Students' situational motivational beliefs and physiological arousal in collaborative learning</i></p>

	<p><i>Metacognitive AI Agent in Collaborative Groups – Recognition of Triggers for Regulation</i></p> <p>Corinne Wyss</p> <p><i>Co-design of online teacher professional development courses – Findings of a development project</i></p>	<p><i>measurement principles to study team stress and team adaptation</i></p>	
<p>19:00-23:00</p>	<p>Conference Dinner EC Dalhs Brewery</p>		

Day 3 – Wednesday 27.11. (Joint day with NordicLASI)

9:00-10:15	Invited symposium (Room EL2): A micro-ecological, process-oriented, and multimodal approach to studying collaborative learning Organiser: Crina Damsa & Hanni Muukkonen Chair: Anni Silvola & Rogers Kaliisa Discussant: Olga Viberg Anni Silvola <i>AI agents, collaborative problem-solving, sociocultural boundaries, AI capabilities</i> Daniel Sanchez <i>Sense-making and Use of Multimodal Feedback in Team-based Simulations in Nursing Education</i> Marcella Hoogeboom <i>Multichannel Process Approach to Understanding Collaboration Patterns in VR Training for Polices</i>	Paper session (Room EL6): Eye tracking Chair: Saswati Chaudhuri Florian Hauser <i>Holistic models of image perception: Can they be used to analyze eye movements during code reviews?</i> Leen Catrysse <i>Yarbus Revisited: The Webcam Edition</i> <i>Reading strategies in poor decoders: a webcam-based eye-tracking study</i> Ellen Kok <i>Is Big Brother watching or helping me? Students' thoughts about eye tracking to support learning</i> Raija Hämäläinen <i>Using eye tracking to support professional learning: A case of aviation pilots</i>		
10:15-10:30	Coffee break			
10:30-11:45	Keynote (Room EL6) Joint with NordicLASI Michail Giannakos <i>Multimodal AI for hybrid human learning</i>			
11:45-13:00	Lunch break			
13:00-14:00	Panel discussion (Room EL6): Joint with NordicLASI Chair: Kshitij Sharma <i>Educational design and research using responsible online process measures</i> Tamara van Gog, Olga Viberg, Michail Giannakos			
14:00-14:30	Coffee break			
14:30-16:00	Symposium (Room EL3): Behind the scenes: Infrastructure, data collection, and services in learning process research Organiser: Halszka Maria Jarodzka, David Gijbels, Sanna Järvelä Chair: Leen Catrysse Discussant: Marcella Hoogeboom	Symposium (Room EL2): Hybrid Intelligence: Human-AI Co-evolution and Learning Organiser: Andy Nguyen & Sanna Järvelä Chair: Andy Nguyen Discussant: Barbara Wasson	Paper session (Room EL6): Joint with NordicLASI Learning analytics dashboards Chair: Anni Silvola Amber Hoefkens <i>Designing a feedback dashboard for primary and secondary education via educational design research</i>	

	<p>Glen Joris <i>Building infrastructure for psychophysiological and behavioural methods: Looking back and forward</i></p> <p>Senne Van Hoecke <i>Moving outside the lab: Lessons learned</i></p> <p>Antti Siipo, Niina Palmu <i>Studying learning and interaction in multidisciplinary research infrastructure through technology</i></p>	<p>Kshitij Sharma <i>Teacher-AI Entanglement: Lessons Learned from an Embodied Mathematics Learning Experience</i></p> <p>Roger Azevedo <i>Fostering Human-AI Co-evolution and Learning through Pedagogical Agents and Multimodal Data</i></p> <p>Sanna Järvelä <i>Human-AI Collaboration: Learning Regulation Together with Artificial Agents</i></p>	<p>Egle Gedrimiene <i>Higher Education Students' Value Tensions and Alignments with Learning Analytics Dashboard</i></p> <p>Kshitij Sharma <i>An emotion-stress aware dashboard for school teachers</i></p> <p>Richard Davis <i>Dashboards do not support the teaching styles of most instructors: How do we move forward?</i></p>
16:00-16:30	SIG 27 closing session (EL6)		