AIDEA 2025

Sunday, February 23, 2025

Time	Activity
19:00	Optional joint dinner, Gablerbräu: www.gablerbrau.at

Monday, February 24, 2025

Time	Activity	
9:00-9:30	Opening and introduction Room: HS 402 Blauer Hörsaal	
9:30-10:30	Refactoring Computer Science & Data Science Education in the Age of Generative AI, Orit Hazzan Room: HS 402 Blauer Hörsaal, Chair: S. Schönbrodt	
10:30-11:00	Break	
11:00-12:30	CRITICAL EDU & SOCIAL GOOD 1: Critical Bildung: Society as Algorithmic Social Machine? Machine metaphors for the Digital Enlightenment Harald Gapski 2: On creative thinking in AI and data science education, Dan Verständig 3: Unplugged activities as introduction to data science with focus on ethical and social dimensions, Christian Andersson Room: HS 413, Chair: K. Binder	DS EDUCATION & SOCIAL GOOD 4: Data science for informed citizen: Learning at the intersection of data literacy, statistics and social justice, Joachim Engel 5: Data are at the Center of Data Science: My take on what everyone should know about data, Arne Bathke 6: High-school data science: a "data moves" perspective, Tim Erickson Room: HS 414, Chair: S. Podworny
12:30-13:45	Lunch	
13:45-14:45	Generation AI: Tools for AI Education, Matti Tedre, Henriikka Vartiainen Room: HS 402 Blauer Hörsaal, <u>Chair: S. Schneider</u>	
14:45-15:15	Break	
15:15-16:15	LEARNING MATERIAL ON AI/ DESIGN PRINCIPLES	AI & DS CURRICULA/LEARNING MATERIAL













	7: Data-related concepts, practices and	9: Insights and approaches from the AI
	design principles for teaching AI topics	Competency Center of the Hamburg State
	in secondary schools, Viktoriya Olari	Institute for Teacher Training and School
	8: AI in an online schoolbook, Hannes	Development, Britta Kölling
	Heusel	10: Fostering data and AI competencies in
		primary schools, Anja Gärtig-Daugs
	Room: HS 413, <u>Chair: S. Schneider</u>	Room: HS 414, <u>Chair: S. Kindler</u>
16:15-16:55	Small group discussions, Moderators: S. Schönbrodt, S. Podworny, R. Biehler, Y. Fleischer, I. Gal, C. Schulte, T. Erickson, T. Weiland, J. Engel	
17:00-18:00	Workshop 1: An introduction to CODAP,	Workshop 2: Hands-on introduction to K-12
	Tim Erickson	AI education using XAI social media
		simulator "Somekone", Matti Tedre,
		Henriikka Vartiainen
	Room: HS 413	Room: HS 414
18:30	Optional joint dinner: La Cantinetta, <u>www.cantinetta.at</u>	













Tuesday, February 25, 2025

Time	Activity	
9:00-9:30	Morning session, recap of day 1	Room: HS 402 Blauer Hörsaal, <u>Chair: I. Gal</u>
9:30-10:30	Lessons Learned from the ProDaBi Project: Data, AI, and Education, Rolf Biehler , Car	
10:30-11:00	Break	
11:00-12:30	PRODABI PERSPECTIVES Empowering students in a data-driven world: Explanatory models for understanding data-driven technologies from everyday life, Lukas Höper, Yannik Fleischer	PRODABI PERSPECTIVES Empowering students to gain insights within data exploration projects in the classroom - Using, modifying and creating data moves through a scaffolded use of digital tools, Sven Hüsing, Susanne Podworny
	Room: HS 413	Room: HS 414
12:30-13:45	Lunch	
13:45-14:45	Education with and about AI: Implementation of a participatory teaching platform, Sarah Schönbrodt, Steffen Schneider Room: HS 402 Blauer Hörsaal, Chair: H. Vartiainen	
14:45-15:15	Break	
15:15-16:15	AI & DS EDUCATION FROM A MATH PERSPECTIVE 11: Competencies and curriculum implications at the intersection of mathematics, data science and statistics, Cathy Smith 12: Unsupervised machine learning as learning content in lower secondary school, Katharina Bata Room: HS 413, Chair: Y. Fleischer	LEARNING MATERIAL ON AI – MATH PERSPECTIVE 13: What university-level mathematics needed to understand deep learning can be made accessible in high-school?, Martin Frank 14: Analysis of artificial neural networks as mathematical functions in the classroom, Stephan Kindler Room: HS 414, Chair: M. Geroldinger
16:15-17:00	Small group discussion, Moderators: S. Hüsing, L. Hörper, K. Binder, O. Hazzan, M. Wilkerson, J. Waite, D. Verständig, H. Vartiainen, V. Olari	
18:30	Optional joint dinner: Wirtshaus Metzgersteig, www.metzgersteig.at	













Wednesday, February 26, 2025

Time	Activity	
9:00-9:30	Morning session, recap of day 2	Room: HS 402 Blauer Hörsaal, <u>Chair: M. Frank</u>
9:30-10:30	Research to Practice: Designing Learning E World and the World with Data Visualization	xperiences for Teachers around Reading the ons, Travis Weiland Room: HS 402 Blauer Hörsaal, Chair: M. Frank
10:30-11:00	Break	
11:00-12:30	AI COMPETENCIES 15: AI interaction competencies: feedback literacy and legitimation code theory semantics, Jane Waite 16: Constructing & Deconstructing Large Language Models in High School Classrooms, Karl-Emil Kjær Bilstrup 17: Data and AI Readiness: Competencies for school students to become informed citizens, Katharina Schüller Room: HS 413, Chair: C. Schulte	AI EDUCATION IN CS 18: On the Interdependency between Artificial Intelligence and Environment and its Implications on CS Education, Marc Berges 19: AI as content not tool, Arnold Pears 20: Understanding understanding AI, Andreas Mühling Room: HS 414, Chair: S. Hüsing
12:30-13:15	Small group discussion, Moderators: G. Steinbauer-Wagner, M. Frank, C. Smith, K. Bata, S. Schneider, S. Kindler, S. Sentance, M. Tedre, K. Miller	
13:15-14:00	Lunch	
15:30-17:30	City Tour	













Version: 20.01.2025

Thursday, February 27, 2025

Time	Activity	
9:00-9:30	Morning session, recap of day 3	Room: HS 402 Blauer Hörsaal, <u>Chair: T. Weiland</u>
9:30-10:30	Exploring a US Framework of Learning Progressions for K-12 Data Science Education, Katherine Miller, Michelle Wilkerson *Room: HS 402 Blauer Hörsaal, Chair: T. Weiland	
10:30-11:00	Break	
11:00-12:30	AI LITERACY IN SCHOOL 21: Navigating the Digital Frontier - Teaching Data Science and AI Skills in the Austrian school subject digital literacy, Martin Geroldinger 22: Providing AI Literacy in Schools – Two Sides of a Medal, Gerald Steinbauer-Wagner 23: Data and AI Literacy with creativity and fun! Kate Farrell Room: HS 413, Chair: L. Höper	DS FROM A MATH PERSPECTIVE 24: AI education in the mathematics classroom, Sarah Schönbrodt 25: Software-supported and simulation- based introduction to significance tests, Karin Binder 26: Data cleaning in mathematics education, Jakim Eckert Room: HS 414, Chair: K. Bata
12:30-13:45	Lunch	
13:45-14:45	Design principles and resources for introductory AI lessons for 11 to 14 year old learners, Jane Waite , Sue Sentance **Room: HS 402 Blauer Hörsaal, **Chair: M. Wilkerson**	
14:45-15:30	Small group discussion, Moderators: A. Mühling, K. Schüller, A. Pears, A. Kuhnla, B. Kölling, K. Kjær Bilstrup, J. Eckert, M. Geroldinger, H. Gapski	
15:30-16:00	Break	
16:00-17:15	Panel discussion (Rolf Biehler, Carsten Schulte, Sue Sentance, Dan Verständig, and Michelle Wilkerson) *Room: HS 402 Blauer Hörsaal*	
18:30	Symposium Dinner, Sternbräu, www.sternb	<u>rau.at</u>













Friday, February 28, 2025

Note: The talks take place in a different building (see below for more details)

Time	Activity
9:00-9:30	Morning session, recap of day 4 Room: 1.006/1007, Chair: T. Erickson
9:30-10:30	Infusing 'data science and AI literacy' for the general learner population: Conceptual, instructional, and systemic challenges, Iddo Gal **Room: 1.006/1007, **Chair: T. Erickson**
10:30-11:30	General discussion of the symposium *Room: 1.006/1007, Moderation: R. Biehler*
11:30-11:45	Farewell and takeaways **Room: 1.006/1007

Further information on the location of the rooms:

The talks on *Monday - Thursday* take place at Hellbrunnerstraße 34 (google maps) in rooms:

- HS 402 Blauer Hörsaal: Ground Floor (see on building plan)
- HS 413: 2. Floor (see on building plan)
- HS 414: 2. Floor (see on building plan)
- The coffee breaks take place on the 2. Floor (see on building plan)

The talks on Friday take place at Erzabt-Klotz-Straße 1 (see google maps) in room:

Room 1.006/1007











