

# AIDEA 2025

## Sunday, February 23, 2025

Time	Activity
19:00	Optional joint dinner, Gablerbräu: <a href="http://www.gablerbrau.at">www.gablerbrau.at</a>

## Monday, February 24, 2025

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

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

## Tuesday, February 25, 2025

Time	Activity	
9:00-9:30	Morning session, recap of day 1 <i>Room: HS 402 Blauer Hörsaal, Chair: I. Gal</i>	
9:30-10:30	Lessons Learned from the ProDaBi Project: Shaping Perspectives at the Intersection of Data, AI, and Education, <b>Rolf Biehler, Carsten Schulte</b> <i>Room: HS 402 Blauer Hörsaal, Chair: I. Gal</i>	
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, <b>Lukas Höper, Yannik Fleischer</b> <i>Room: HS 413</i>	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, <b>Sven Hüsing, Susanne Podworny</b> <i>Room: HS 414</i>
12:30-13:45	Lunch	
13:45-14:45	Education with and about AI: Implementation of a participatory teaching platform, <b>Sarah Schönbrodt, Steffen Schneider</b> <i>Room: HS 402 Blauer Hörsaal, Chair: H. Vartiainen</i>	
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, <b>Cathy Smith</b> 12: Unsupervised machine learning as learning content in lower secondary school, <b>Katharina Bata</b> <i>Room: HS 413, Chair: Y. Fleischer</i>	LEARNING MATERIAL ON AI – MATH PERSPECTIVE 13: What university-level mathematics needed to understand deep learning can be made accessible in high-school?, <b>Martin Frank</b> 14: Analysis of artificial neural networks as mathematical functions in the classroom, <b>Stephan Kindler</b> <i>Room: HS 414, Chair: M. Geroldinger</i>
16:15-17:00	Small group discussion, <i>Moderators: S. Hüsing, L. Hörper, K. Binder, O. Hazzan, M. Wilkerson, J. Waite, D. Verständig, H. Vartiainen, V. Olari</i>	
18:30	Optional joint dinner: Wirtshaus Metzgersteig, <a href="http://www.metzgersteig.at">www.metzgersteig.at</a>	

## Wednesday, February 26, 2025

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

## Thursday, February 27, 2025

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

## 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 <i>Room: 1.006/1007, <u>Chair: T. Erickson</u></i>
9:30-10:30	Infusing ‘data science and AI literacy’ for the general learner population: Conceptual, instructional, and systemic challenges, <b>Iddo Gal</b> <i>Room: 1.006/1007, <u>Chair: T. Erickson</u></i>
10:30-10:40	Break
10:40-11:30	General discussion of the symposium <i>Room: 1.006/1007, <u>Moderation: R. Biehler</u></i>
11:30-11:45	Farewell and takeaways <i>Room: 1.006/1007</i>

### 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