AIDEA 2025

## Sunday, February 23, 2025

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| **Time** | **Activity** |
| 19:00 | Optional joint dinner, Gablerbräu: [www.gablerbrau.at](https://www.gablerbrau.at/) |

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## Monday, February 24, 2025

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| **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, Chair: S. Schneider* | |
| 14:45-15:15 | Break | |
| 15:15-16:15 | LEARNING MATERIAL ON AI/ DESIGN PRINCIPLES  7: Data-related concepts, practices and design principles for teaching AI topics in secondary schools, **Viktoriya Olari**  8: AI in an online schoolbook, **Hannes Heusel**    *Room: HS 413, Chair: S. Schneider* | AI & DS CURRICULA/LEARNING MATERIAL  9: Insights and approaches from the AI Competency Center of the Hamburg State Institute for Teacher Training and School Development, **Britta** **Kölling**  10: Fostering data and AI competencies in primary schools, **Anja Gärtig-Daugs**  *Room: HS 414, Chair: S. Kindler* |
| 16:15-16:55 | Small group discussions, *Moderators: S. Schneider, 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, **Tim Erickson**  *Room: HS 413* | Workshop 2: Hands-on introduction to K-12 AI education using XAI social media simulator "Somekone", **Matti** **Tedre, Henriikka Vartiainen**  *Room: HS 414* |
| 18:30 | Optional joint dinner: La Cantinetta, [www.cantinetta.at](https://www.cantinetta.at/) | |

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## Tuesday, February 25, 2025

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| **Time** | **Activity** | |
| 9:00-9:30 | Morning session, recap of day 1  *Room: HS 402 Blauer Hörsaal, Chair: I. Gal* | |
| 9:30-10:30 | Lessons Learned from the ProDaBi Project: Shaping Perspectives at the Intersection of Data, AI, and Education, **Rolf Biehler, Carsten Schulte**  *Room: HS 402 Blauer Hörsaal, Chair: I. Gal* | |
| 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**  *Room: HS 413* | 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 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](https://www.metzgersteig.at/) | |

## Wednesday, February 26, 2025

| **Time** | **Activity** | |
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| 9:00-9:30 | Morning session, recap of day 2  *Room: HS 402 Blauer Hörsaal, Chair: M. Frank* | |
| 9:30-10:30 | Research to Practice: Designing Learning Experiences for Teachers around Reading the World and the World with Data Visualizations, **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. Schönbrodt, S. Kindler, S. Sentance, M. Tedre, K. Miller* | |
| 13:15-14:00 | Lunch | |
| 15:30-17:30 | City Tour | |

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## Thursday, February 27, 2025

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| **Time** | **Activity** | |
| 9:00-9:30 | Morning session, recap of day 3  *Room: HS 402 Blauer Hörsaal, Chair: T. Weiland* | |
| 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.sternbrau.at](https://www.sternbrau.at/) | |

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## Friday, February 28, 2025

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

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| **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](https://www.google.com/maps/place/Brunnen+der+Naturwissenschaftlichen+Fakult%C3%A4t+der+Universit%C3%A4t+Salzburg+(Wander+Bertoni)/@47.7900508,13.0215037,14z/data=!3m1!5s0x477690edcb877d77:0xb6ffa468cd0500ac!4m6!3m5!1s0x4776919a4a731143:0x6f76e361b153d726!8m2!3d47.7886705!4d13.0607618!16s%2Fg%2F11hdlqkqdp?entry=ttu&g_ep=EgoyMDI1MDEwNi4xIKXMDSoASAFQAw%3D%3D)) in rooms:

* HS 402 Blauer Hörsaal: Ground Floor (see on [building plan](https://online.uni-salzburg.at/plus_online/ris.ris?corg=19091&pQuellGeogrBTypNr=5&pZielGeogrBTypNr=5&pZielGeogrBerNr=5720009&pRaumNr=8204&pActionFlag=A&pShowEinzelraum=J))
* HS 413: 2. Floor (see on [building plan](https://online.uni-salzburg.at/plus_online/ris.ris?corg=19091&pQuellGeogrBTypNr=5&pZielGeogrBTypNr=5&pZielGeogrBerNr=5720001&pRaumNr=9112&pActionFlag=A&pShowEinzelraum=J))
* HS 414: 2. Floor (see on [building plan](https://online.uni-salzburg.at/plus_online/ris.ris?corg=19091&pQuellGeogrBTypNr=5&pZielGeogrBTypNr=5&pZielGeogrBerNr=5720001&pRaumNr=9534&pActionFlag=A&pShowEinzelraum=J))
* The coffee breaks take place on the 2. Floor (see on [building plan](https://online.uni-salzburg.at/plus_online/ris.ris?corg=15260&pQuellGeogrBTypNr=5&pZielGeogrBTypNr=5&pZielGeogrBerNr=5720001&pRaumNr=8917&pActionFlag=A&pShowEinzelraum=J))

The talks on *Friday* take place at Erzabt-Klotz-Straße 1 (see [google maps](https://www.google.com/maps/place/Unipark+Nonntal/@47.7948579,13.0541279,17z/data=!3m1!4b1!4m6!3m5!1s0x4776908c9a12d535:0x732abfdaec80e986!8m2!3d47.7948579!4d13.0541279!16s%2Fg%2F1q5bmp0gz?entry=ttu&g_ep=EgoyMDI1MDEwNi4xIKXMDSoASAFQAw%3D%3D)) in room:

* Room 1.006/1007