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, Chair: S. Schneider | |
| 14:45-15:15 | Break | |
| 15:15-16:15 | LEARNING MATERIAL ON AI/ DESIGN PRINCIPLES | AI & DS CURRICULA/LEARNING MATERIAL |













| | 7. Data related aspearts, practices and | Or Insights and approaches from the AI |
|-------------|---|---|
| | 7: Data-related concepts, practices and design principles for teaching AI topics | 9: Insights and approaches from the AI 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. 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, | 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 <i>Room: HS 402 Blauer Hörsaal, <u>Chair: M. Frank</u></i> |
| 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 | |













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 <i>Room: HS 402 Blauer Hörsaal, Chair: T. Weiland</i> | |
| 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 Sch Michelle Wilkerson) | ulte, Sue Sentance, Dan Verständig, and 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











