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Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XXVIII, 518 p. 131 illus., 103 illus. in color.)
Collana	Lecture notes in computer science
Disciplina	371.334
Soggetti	Intelligent tutoring systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Full Papers -- RepairNet: Contextual Sequence-to-Sequence network for automated program repair -- Seven-year longitudinal implications of wheel spinning and productive persistence -- A Systematic Review of Data-driven Approaches to Item Difficulty Prediction -- Annotating Student Engagement Across Grades 1-12: Associations with Demographics and Expressivity -- Affect-Targeted Interviews for Understanding Student Frustration -- Explainable Recommendations in a Personalized Programming Practice System -- Multilingual Age of Exposure -- DiSCS: A New Sequence Segmentation Method for Open-Ended Learning Environments -- Interpretable Clustering of Students' Solutions in Introductory Programming -- Adaptively Scaffolding Cognitive Engagement with Batch Constrained Deep Q-Networks -- Ordering Effects in a Role-Based Scaffolding Intervention for Asynchronous Online Discussions -- Option Tracing: Beyond Correctness Analysis in Knowledge Tracing -- An approach for detecting student perceptions of the programming experience from interaction log data -- Discovering Co-creative Dialogue States during Collaborative Learning -- Affective Teacher Tools: Affective Class Report Card and Dashboard -- Engendering Trust in Automated Feedback: A Two Step Comparison of Feedbacks in Gesture Based Learning -- Investigating students' reasoning in a code-tracing tutor -- Evaluating Critical Reinforcement Learning Framework In the Field --

Machine learning models and their development process as learning affordances for humans -- Predicting Co-Occurring Emotions from Eye-Tracking and Interaction Data in MetaTutor -- A Fairness Evaluation of Automated Methods for Scoring Text Evidence Usage in Writing -- The Challenge of Noisy Classrooms: Speaker Detection During Elementary Students' Collaborative Dialogue -- Extracting and Clustering Main Ideas from Student Feedback using Language Models -- Multidimensional Team Communication Modeling for Adaptive Team Training: A Hybrid Deep Learning and Graphical Modeling Framework -- A Good Start is Half the Battle Won: Unsupervised Pre-Training for Low Resource Children's Speech Recognition for an Interactive Reading Companion -- Predicting Knowledge Gain during Web Search based on Multimedia Resource Consumption -- Deep Performance Factors Analysis for Knowledge Tracing -- Gaming and frustration explain learning advantages for a math digital learning game -- Tackling the Credit Assignment Problem in Reinforcement Learning-Induced Pedagogical Policies with Neural Networks -- TARTA: Teacher Activity Recognizer from Transcriptions and Audio -- Assessing Algorithmic Fairness in Automatic Classifiers of Educational Forum Posts -- "Can you clarify what you said?": Studying the impact of tutee agents' follow-up questions on tutors' learning -- Classifying Math Knowledge Components via Task-Adaptive Pre-Trained BERT -- A Multidimensional Item Response Theory Model for Rubric-based Writing Assessment -- Towards Bloom's Taxonomy Classification Without Labels -- Automatic Task Requirements Writing Evaluation With Feedback via Machine Reading Comprehension -- Temporal Processes Associating with Procrastination Dynamics -- Investigating Students' Experiences with Collaboration Analytics for Remote Group Meetings -- "Now, I Want to Teach it for Real!": Introducing Machine Learning as a Scientific Discovery Tool for K-12 Teachers,. Better Model, Worse Predictions: The Dangers in Student Model Comparisons.

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Sommario/riassunto

This two-volume set LNAI 12748 and 12749 constitutes the refereed proceedings of the 22nd International Conference on Artificial Intelligence in Education, AIED 2021, held in Utrecht, The Netherlands, in June 2021.\* The 40 full papers presented together with 76 short papers, 2 panels papers, 4 industry papers, 4 doctoral consortium, and 6 workshop papers were carefully reviewed and selected from 209 submissions. The conference provides opportunities for the cross-fertilization of approaches, techniques and ideas from the many fields that comprise AIED, including computer science, cognitive and learning sciences, education, game design, psychology, sociology, linguistics as well as many domain-specific areas. \*The conference was held virtually due to the COVID-19 pandemic.

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