



Dr. Yuki Hirai (Matsumoto Campus)

Associate Professor

Head, Division of Data Science Education,
Center for General Education

yhirai@shinshu-u.ac.jp

Research fields

Educational Technology

Computer Science

High-school & University Articulation

Key Words

Learning by Question (Quiz) Creation

Computer-supported Collaborative Learning

Programming Education

Mathematics Education

Web-based Learning Support System

Computer-based Testing (CBT)

Subject of research on Data Science

Question Creation and Utilization

in Web-based Data Science Education

Learning Analytics

in Web-based Learning Support System

Journal Papers in Educational Technology

1. [Y. Hirai](#), M. Tokita, K. Takano, S. Koyama, A. Katsuki, M. Niimura, and N. Matsumura: University-level Mathematics Pre-enrollment Education Combining Individual and Group Works in a Perfectly Distributed Asynchronous Environment, *Journal of Information Processing* 30, pp. 15-20 (2022).
2. T. Tanaka, H. Hashiura, A. Hazeyama, S. Komiya, [Y. Hirai](#), and K. Kaneko: Learners' Self Checking and Its Effectiveness in Conceptual Data Modeling Exercises, *IEICE Transactions on Information and Systems* E101-D(7), pp. 1801-1810 (2018).
3. R. Onda, [Y. Hirai](#), K. Penny, B. Indurkha, and K. Kaneko: A Support System for Solving Problems of Two-Triangle Congruence Using 'Backward Chaining', *IEICE Transactions on Information and Systems* E100-D(10), pp. 2567-2577 (2017).
4. M. N. Hasnine, M. Ishikawa, [Y. Hirai](#), H. Miyakoda, and K. Kaneko: An Algorithm to Evaluate Appropriateness of Still Images for Learning Concrete Nouns of a New Foreign Language, *IEICE Transactions on Information and Systems* E100-D(9), pp. 2156-2164 (2017).