Rubric-based Assessment of Programming Thinking Skills and Comparative Evaluation of Introductory Programming Environments

Hironori Washizaki

Associate Dean, Research Promotion Division, WASEDA University, Japan

In this presentation, I will illustrate a scoring rubric for evaluating the quality of learners' responses from the viewpoint of programming thinking skills in introductory programming courses targeting children, including from fourth to sixth-grade students. The presentation will show its purpose, design, and lessons learned as a result of its application in Japanese elementary schools. Furthermore, the talk will refer to a comparative evaluation of introductory programming tools and environments by using the rubric.