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The First Workshop on AI-supported Education for Computer Science (AIEDCS 2013)

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Preface

The global economy increasingly depends upon Computer Science and Information Technology professionals to maintain and expand the infrastructure on which business, education, governments, and social networks rely. Demand is growing for a global workforce that is well versed and can easily adapt ever-increasing technology. For these reasons, there is increased recognition that computer science and informatics are becoming, and should become, part of a well-rounded education for every student. However, along with an increased number and diversity of students studying computing comes the need for more supported instruction and an expansion in pedagogical tools to be used with novices. The study of computer science often requires a large element of practice, often self-guided as homework or lab work. Practice as a significant component of the learning process calls for AI-supported tools to become an integral part of current course practices.

Designing and deploying AI techniques within computer science learning environments presents numerous challenges. First, computer science focuses largely on problem solving skills in a domain with an infinitely large problem space. Modeling possible problem solving strategies of experts and novices requires techniques that address many types of unique but correct solutions to problems. In addition, there is growing need to support affective and motivational aspects of computer science learning, to address widespread attrition of students from the discipline. AIED researchers are poised to make great strides in building intelligent, highly effective AI-supported learning environments and educational tools for computer science and information technology. Spurred by the growing need for intelligent learning environments that support computer science and information technology, this workshop will provide a timely opportunity to present emerging research results along these lines.

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Program Committee

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