

Invited Workshop

Alice 3 and Java for CS1 & AP CS

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Abstract

This workshop is intended for instructors of CS1 or AP CS courses. This SIGCSE workshop is the first to provide instruction in using Alice3 with built-in integration of Alice and Java. The workshop offers hands-on experience programming with Alice3 and Java together. Alice3 builds on Alice2's powerful program visualization tool, enabling students to "see" objects and work with object-oriented programming. Participants will learn how to use Alice3 to build virtual worlds and how to use this approach in CS1 courses (introductory programming for majors and non-majors and AP CS). Participants will receive a CD containing Alice3 beta and sample virtual worlds developed as part of NSF-0736552, 0736697, and 0736945 grants. Laptop required, Mac or PC.

Categories & Subject Descriptors: K.3.2 [Computers and Education]: Computer and Information Science Education – *Computer science education*. K.3.1 [Computers and Education]: Computer uses in education – *Computer Assisted Instruction*.

General Terms: Human Factor

Bio

Don Slater was already a secondary school teacher in Western Pennsylvania when the first personal computers were introduced into his building. He became a computer science teacher because of the cool things that he wanted to do with computers. And he has found that the best way for him to learn about anything is to teach someone else. Don was a teacher and technology director at Sewickley Academy, a private school in the Pittsburgh area. In 1998, he began teaching introductory programming part time at Carnegie Mellon University. In 2000, he was invited to become a full time member of the Computer Science Department as an Assistant Teaching Professor.

He joined the Alice Team in the fall of 2005 as he introduced Alice into his Introductory Programming course. Wanda Dann happened to be on sabbatical at Carnegie Mellon that fall, and she became a valuable advisor as they explored the use of Alice in his course. With Wanda and Steve Cooper, he has since presented at teacher training workshops around the country, as well as at various conferences, including NECC, SIGCSE, IMICT, and ISECON.

Don is a consultant for the College Board in Advanced Placement Computer Science. He has served as a reader and leader at the yearly Advanced Placement Computer Science Exam grading since 1991. He has written articles for the College Board and led teacher workshops throughout the east, and he now directs the Advanced Placement Teacher Workshop held each summer at Carnegie Mellon.