ABSTRACT
This tutorial, designed for instructors of CS1/AP, introduces Alice3 with built-in transition from Alice to Java. The workshop offers hands-on experience programming with Alice3 and integrating a transition to Java IDE, e.g. NetBeans. Alice3 builds on Alice2’s powerful program visualization technique, enabling students to “see” objects and work with object-oriented programming.

Categories and Subject Descriptors
K.3 [Computers & Education]: Computer & Information Science Education – Computer Science Education

General Terms
Documentation, Human Factors.

Keywords
Visualization, Animation, 3D, Classes, Objects.

1. INTRODUCTION
Alice is a 3D animation programming environment [1] for introducing fundamental programming concepts in a wide range of courses: CS1, Introduction to Programming, Programming for Nonmajors, Computer Literacy, pre-AP, AP Computer Science. Currently, Alice is provided in two versions. Alice 2 (latest update is 2.2) is for courses where students are not expected to transition to a production level language such as C, C++, or Java. Alice 3 is for courses where students are expected to make that transition during the course, for example in a traditional CS1 or AP CS course.

2. PARTICIPANTS
Participants in this tutorial will learn how to use Alice3 to build virtual worlds and how to transition from Alice to Java in a CS1 level course (introductory programming for majors and non-majors and AP CS). Participants are expected to bring their own laptop (PC or Mac) and will receive a thumb-drive containing the latest version of Alice3 and sample virtual worlds developed as part of NSF-0736552.

3. REFERENCES