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Alice 3.0: Innovations in Teaching Introductory Computing

W. Brett McKenzie

Roger Williams University, wmckenzie@rwu.edu

David Bennett

Roger Williams University, dbennett051@hawks.rwu.edu

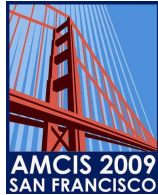
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McKenzie, W. Brett and Bennett, David, "Alice 3.0: Innovations in Teaching Introductory Computing" (2009). *AMCIS 2009 Proceedings*. 81.

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**WORKSHOP PROPOSAL
FOR AMCIS 2009**

15th Americas Conference on Information Systems

The Golden Gate to the Future of IS

August 06-09, San Francisco, CA, USA

San Francisco Marriott

www.amcis2009.org

Submission Date:

Workshop Title:	ALICE 3.0 : INNOVATIONS IN TEACHING INTRODUCTORY COMPUTING
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Duration	() Full day (X) Half day
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Abstract

Alice 3.0 is the latest release of the Alice programming environment developed at CMU by the late Randy Pausch. Over 200 universities use Alice to introduce object-oriented, event-driven programming to students. Alice 3.0 generates its worlds as Java code, and answers the primary criticism that earlier versions of Alice were a sealed environment and did not expose student to computer code. This workshop will guide participants in building an Alice 3.0 program, demonstrate its integration with NetBeans Java IDE, and show how Alice 3.0 code can be modified with Java code in NetBeans. Participants will receive the latest release of the software suite.

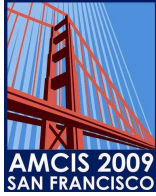
Workshop leader information

LEADER

Name:	Dr. W. Brett McKenzie
Affiliation:	Gabelli School of Business, Roger Williams University
Postal address:	One Old Ferry Rd., Bristol, RI 02809
Telephone:	(401) 254-3534
Cell	(401) 835-8958
Fax	(401) 254 3545
e-mail:	wmckenzie@rwu.edu

Additional Workshop presenters:

Name:	David Bennett
Affiliation:	Gabelli School of Business, Roger Williams University
Postal address:	One Old Ferry Rd., Bristol, RI 02809
Telephone:	(401) 254-3534
Cell	
Fax	(401) 254 3545
e-mail:	dbennett051@hawks.rwu.edu



Copy for each one.

Speakers' background, description of workshop, and envisioned activities during the workshop (For each speaker provide information)

Dr. W. Brett McKenzie has been teaching with Alice since 2004 and was awarded an NSF Fellowship in 2007 and 2008 to present workshops for NCTT as well as presentations at the Alice summer workshops and ISECON. In summer 2007, he hosted the first Alice/Media Comp conference at Roger Williams University. He has published on Alice and innovative approaches to computing and was nominated as a Best Paper Finalist at ICIS/SIGED AIM in 2006.

David Bennett, RWU '10 has extensive experience with developing worlds in Alice and has won awards at academic competitions for his work. Most recently he has served as a student liaison to the Alice development team at CMU during the beta testing of Alice 3.0

Dr. McKenzie, David Bennett and RWU were selected to participate in the first large scale testing of the Alice 3.0 Beta release in a classroom in Spring 2009. As the only business school and IS program in the initial release, we have brought a unique perspective to the development team at CMU.

Workshop Activities:

a) Distribution, installation, and configuration of Alice 3.0, Netbeans, and NetBeans Modules.

b) Introduction to Alice 3.0

- a. Traditional Alice
- b. Storytelling Alice
- c. Electronic Arts and SIMS

c) Developing a simple Alice 3.0 World (Models instructional practice)

- a. Planning – storyboard/pseudocode
- b. Building/coding
- c. Run and Debug

d) Importing Alice world to NetBeans (Models instructional practice)

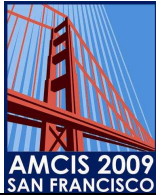
- a. Running world from within NetBeans
- b. Modifying code
- c. Run and debug

e) Instructional Issues

- a. Classroom models
- b. Syllabus and support materials
- c. Alice community

f) Questions

Context:



Alice is a programming environment and approach to introducing programming that recognizes contemporary students have grown up in a media rich world. Alice programs are virtual worlds, either animations or games, where students program interactions between characters and objects. Students program by dragging and dropping tiles that represent commands. The Alice interface is a response to the studies that indicated the idiosyncratic syntax of computer languages was a barrier to success for beginning programmers. Many CS programs have adopted Alice to bootstrap students in computing programs. Alice has been shown to improve success in more advanced programming classes and improve retention in the field. The use of Alice in IS programs is less common, in part because it is less well known in the IS community which has had less input in its development.

Alice 3.0 is the latest version. While there has been extensive interest in the inclusion of the Sims characters, licensed by Electronic Arts, to improve the animation, there are major changes in the interface and code generated. Alice 3 is designed to produce Java code. The resulting programs can then be modified using a traditional IDE and writing Java code directly to create a new world. Exposing the code answers a significant criticism of earlier versions of Alice that it was just a “toy” and its sealed worlds did not allow students to see how the drag and drop interface created code.

The Alice team will distribute the latest release at ACM-SIGCSE meeting in March. We are authorized to provide participants with the latest release at the August AMCIS meeting.

Special requirements

Note: Regular equipment includes a computer, projector and screen.

(X) Computers –

ATTENDEES SHOULD BRING LAPTOPS (MAC or PC)

ALICE SOFTWARE WILL BE PROVIDED

(X) Internet access – DESIRABLE BUT NOT REQUIRED

(X) Others. Please specify: _FLIP CHART/WHITEBOARD_____

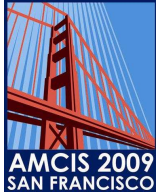
Audience

– FACULTY TEACHING INTRODUCTORY COMPUTING

– FACULTY INVOLVED IN OUTREACH, ESPECIALLY IN HIGH SCHOOLS

– FACULTY INTERESTED IN ALTERNATIVE APPROACHES TO INTRODUCING THIS GENERATION TO COMPUTING AND PROGRAMMING.

Maximum number of participants: 25



Please submit your proposal by **March 3, 2009** using the Manuscript Central online review system (<http://mc.manuscriptcentral.com/amcis2009>).

Further instructions will be available at www.amcis2009.org

You need to register first, and then act as an author to submit your proposal as a manuscript.

Submission Guidelines

All submissions should be 5 pages or less (double-spaced) and in MS Word or PDF format.

Requirements for proposals will be provided on the Call for workshops page

http://amcis2009.aisnet.org/index.php?option=com_content&view=category&layout=blog&id=39&Itemid=68:

Final decisions on the proposals will be made by **April 14th, 2009**.

Please submit more specific inquiries directly to AMCIS 2009 Workshop Chairs:

Henri Isaac isaac@dauphine.fr

Nicholas Romano nicholas.romano@okstate.edu