# Learnin to Program WITH Alice **Robert Clendening Amherst High School**

# The Alice Software

- A 3D interactive animation environment
- A tool for teaching fundamental programming concepts
  - object oriented



 Developed at Carnegie Mellon University over a decade ago



## The Alice Software





# Programming with Alice

#### Alice is a "free" public service with many free resources. It is sponsored by companies like:





#### Learn Programming Using The Alice Approach

- Alice uses **3D graphics** to engage students
- It has as a "smart" drag-and-drop editor that prevents common syntax errors
- Alice Appeals to a wide audience

nowman's details		World.my first method
properties methods questions		World.my first method No parameters
snowman move toward		No variables
snowman move away from		Do in order
snowman orient to		Co Mothing
snowman turn to face		the entire World
snowman point at		Camera
snowman set point of view to		Light
snowman set pose		ground
		snowwoman 🔸 <a>the entire snowwoman</a>
snowman stand up	<u></u>	snowwoman2 > bottom
		Sno ir snowman > rightArm

### **Key Alice Features**

#### Makes objects something students can see and relate to



 Has a java syntax mode to ease the transition to C++/Java/VB.net

#### Learn Programming Using The Alice Approach

#### Students Learn To Program Storytelling Animations & Create Interactive Computer Games

This Course is <u>NOT</u> threatening; Alice builds confidence in learning the basic fundamentals of computer science!!

• With Alice, The sky is the limit!





#### Some Schools Using Alice Since 2003

- Bucknell University
- California Lutheran University
- California State University at Humboldt
- Camden County College
- Carnegie Mellon University
- Clemson University
- Colorado School of Mines
- Community College of Philadelphia
- Cornell University
- Duke University
- Georgetown College
- Haverford College
- Ithaca College
- Manor College

- Mississippi Valley State University
- Plymouth State University
- Saint Edward's University
- Saint Joseph's University
- Saint Lawrence College
- San Diego State University
- Sierra Nevada College
- Southwestern University
- Tompkins Cortland Community College
- University of Colorado
- University of Illinois
- University of Mississippi
- Virginia Tech
- And several high schools



### Website & Program Overview

 Lets take a look at the resources available on the web!

#### -http://www.alice.org



### An Alice Software Demonstration



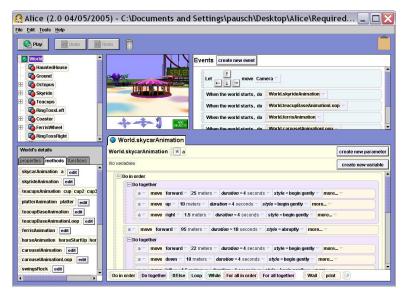


### Some Sample Projects

- Storytelling -"The Tortoise & The Hare"
- Storytelling "Jesse's Girl"
- Videogame Ringboat Rally
- Videogame Flying in Space
- If time: Storytelling Video Game Zombie



# **Questions?**



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