Class Today

• Go over syllabus, web page
• Introduce computer science and Alice
• Demo of Alice
  – Simple world/sample Alice worlds
• Classwork – Get to know each other

www.cs.duke.edu/courses/fall21/compsci094/focus/

About Prof. Rodger

How do you keep your sanity?

TA/UTA introductions

• Graduate TA: Derrick Adam (3:30pm Sec.)
• Undergraduate TAs:
  – Lauren Garbett (10:15am Section)
  – Alex Slover (10:15am Section)
  – Benjamin Keschner (10:15am Section)
  – Sara Azimi (3:30pm Section)
Computer Science is a young discipline

- First computer science department formed in 1962

What is Computer Science?

- Computer science is no more about computers than astronomy is about telescopes. - Edsger Dijkstra

- Computer science is not as old as physics; it lags by a couple hundred years. However this does not mean that there is significantly less on the computer scientist’s plate than on the physicist’s: younger it may be, but it has had a far more intense upbringing! - Richard Feynman

- Artificial Intelligence
  - Roomba
  - Spirit, Mars Rover
  - Self-driving car
  - Personal Robot
What is Computer Science?
• Medicine, Genomics

What is Computer Science?
• Animation

What is Computer Science?
• The Organization of Data, Sharing, and Searching

Computer Science and Programming
• Computer Science is more than programming
  – Called *Informatics* in many countries
  – Elements of both science and engineering
  – Elements of math, physics, cognitive science, music, art, and many other fields
• To some programming is an art, to others a science, to others an engineering discipline.
What Will We Do in CompSci 94?

- Alice 3 programming
- Logistics – bring to online lecture
  - laptop/computer
  - optional Textbook
  - Instead: Free videos

How CompSci 94 Will Work

- In Class
  - Lecture/demos - short
  - Classwork
  - REQUIRED ATTENDANCE
  - Checkoff Classwork
- Outside of class
  - Complete work not finished in class
  - Watch Videos – before class
  - Online Quizzes – before class
  - Assignments

Don’t Send email, use Ed Discussion to ask questions!
What Is Alice?

- A modern programming tool
  - 3-D graphics
  - 3-D models of objects
- Animation
  - Objects can be made to move around virtual world (a simulation or video game)

What does Alice run on?

- Alice is written in Java – should run on many systems
  - supports Mac and PC
- Which version of Alice are we using?
  - Alice 3 (NOT netbeans version, NOT beta)
  - Alice.org, see the CompSci 94 resources page
    - Version 3.6
  - Note: Alice 3 is quite a bit different from Alice version 2

Example from Alice 2

Some Alice 3 examples
Who are you?

The Power of Alice

- Automatically keeps track of 3-D objects
  - What objects are in the virtual world
  - Types of objects
  - Positions of objects in the world

Download Alice 3 from alice.org, NOT Alice 2! NOT netbeans, NOT Beta!

Alice Demo
For Thursday!

- No Alice classwork today but usually you would finish it
- Download Alice 3 if you haven’t yet
- Assignment 1 out – Due Sept 2
  - This assignment does not use Alice
- Watch videos and answer questions for online quiz BEFORE coming to class.