Computer science careers. Computer science at UCSC
Course Evaluations

- Instructor name: Jim Whitehead
- Course name and number: CMPS 10, Intro. Computer Science

- TAs:
  - Kerui Huang
    - He’s the one who comes to class, puts out papers up front
  - Zhongpeng Lin
    - Probably only see him at help sessions, exam reviews
    - He has a class conflict, can’t come to class
Sammy Awards

- Friday, June 10
- Showcase of best computer games created by UC Santa Cruz students this year
- 14-15 games, each with a 7 minute presentation
- Judging of games, awards given at the end

- 4pm, Engineering Lecture Hall 101
- You are welcome to attend!
Final Exam

- **Tuesday, June 7, 9am**
  - Note that registrar’s exam start time is 8am
  - We will not need 3 full hours for the exam
  - So, start at 9am instead

- **Exam review session**
  - Friday, June 3, 7pm
  - Jack’s Lounge, Baskin Engineering Building
    - Enter through main doors from street side.
    - Go to coffee cart, turn left
    - Walk about 75 feet.
    - Jack’s Lounge is in to the left. A large space with whiteboards, tables, etc.
Final Exam format

- Will cover material from entire quarter
- Expect to see questions similar to those from first two midterm exams
- Test will be about 50% longer than the typical midterm exam
- Exam study questions include all of the study questions from the first two midterms
- Additional study questions for material since midterm #2 will be given in class on Friday
Recall that all of the exam 1 and exam 2 review questions are also review questions for the final exam.

What does “generation of dialog” mean in the context of a computer-based dialog system?
- Having a computer generate human-understandable spoken language through the execution of an algorithm
- From Marilyn Walker lecture

Noah Wardrip-Fruin lecture:
- Are computer games a linear, or non-linear experience?
  - Non-linear – there are many paths, many ways to experience a computer game
- What was the topic of Noah’s lecture?
  - Computer-based interactive fictions; stories where the user/player can interact with the story, and change the way it progresses
Final exam review questions

- What is the digital divide in general?
- What is the global digital divide, specifically?
- Be able to provide 2 reasons why access to the Internet is important (or two bad things that happen when you don’t have access to the Internet)
- Be able to give two examples of benefits of mobile phone use for rural people in developing nations
- What is an internet kiosk?
- Do more people have mobile phones or fixed line phones worldwide?
- Do more people have mobile internet connections or fixed internet connections worldwide?
- Be able to describe one benefit of having XO computers (One Laptop per Child project) in a school in a developing country
- What is Drishtee?
- Be able to understand what a short, simple Scratch program does
Careers in Computer Science

- Computer software engineering and computer programmer
  - Employment projected to increase by 21% between 2010 and 2018
  - Faster than average for all occupations
  - Job prospects projected to be excellent
- In May, 2008, median annual wages of computer application software engineers were $85,430
  - This is across all experience levels, and across the nation
- Entry-level salaries in the Silicon Valley region tend to be higher than in other parts of the US
  - Annual entry level salaries tend to range from $60,000-$80,000
  - For startup companies, receive stock options on top of this

Source:
- US Bureau of Labor Statistics
Further classes at UC Santa Cruz

- **CMPS 5J – Introduction to Java Programming**
  - Fall 2011 and Winter 2012
- **CMPS 5P – Introduction to Python Programming**
  - Spring 2012
- **CMPS 80K – Foundations of Interactive Game Design**
  - Spring 2012
  - Learn how to design and create video games
- **CMPS 25 – Introduction to Computer Graphics: 3D Modeling**
  - Fall 2011, Winter 2012
  - Learn how to make 3D images inside a computer using the Blender program. Not a programming course, but quite rigorous.
- **CMPS 26 - Introduction to Computer Graphics: 3D Animation**
  - Spring 2012
  - Learn how to make a 3D animated character. CMPS 25 is a prereq.
Computer Science Majors

- **BS Computer Science**
  - Traditional Computer Science degree.
  - Will train you to be able to gain a software engineering job

- **BA Computer Science**
  - Less structured than BS Computer Science
  - Works well as second major in conjunction with other major
  - Still very rigorous

- **BS Computer Science: Computer Game Design**
  - A strong computer science degree
  - Plus: courses on game design, game programming
  - Year long project sequence where students work in a team to create a working computer game
  - Students can work as software engineers generally, but also work in games industry