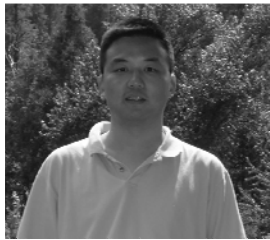


ECS 10

Sept 26

Introductions

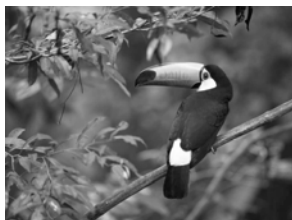
- Prof. Nina Amenta



Kefeng Tan



Kelcey Chan



Vishal Ahuja

A first programming class

- For people with no programming experience
- Learn the computer language Python
- Write six programs

Why learn to program?

- Understand computers
- Computers are used in almost every career
- The programs you have are never exactly what you want.

Example

- UCD Student Health Center Director
 - UCD Medical Center Hospital medical record, or extension of current system
 - Which to choose?
 - How to connect them?
- ...By the end of this course you will be better able to make IT decisions like this.

Another Example

- County manager, trying to decide whether to build a new fire station
 - Log books from fire houses in two different formats
 - Need to get them both into Excel

...by the end of this course, you can handle problems like this yourself.

How does programming help?

- You can handle little problems yourself
- You know when you hire someone how big a job it is
- You have some idea of what is possible.
- A good programmer has lots of job options (you'll need more than this one class, though)

It teaches you to think!

- The computer is a logic machine
- It does exactly what you tell it to
- Your job is figuring out what to tell it
- Learning the language is the easy part; learning to give exact directions is the hard part
- Imagine telling a Martian how to tie their shoes....

Why Python?

- Great for interfacing one program to another
- Free!
- Used in industry – Google, ILM, NASA....
- Easy to get started with!
- Lots of “modules” (plugins, add-ons) that do things like sound editing, computational biology, Web database access.....

Other options

- ECS 15 – More conceptual overview. Understanding how computers and the internet work, a little programming.
- ECS 30 – More intensive class for those with some programming experience (Basic?). Learn C. Required for CS and CSE majors.

Course Structure

- Six programs – 31% of grade.
- Tentative breakdown:
 - “hello” – 1%
 - “battleground states” – 6%
 - “mortgage” – 6%
 - “line drawing” – 6%
 - “data” – 6%
 - “graphing” – 6%
- FIRST PROGRAM DUE 10PM WDS OCT 1

Exams

- Two midterms – 20% each
 - 10/20 and 11/19
 - If you miss the midterm, either:
 - Give me a note from Student Health
 - Get permission at least one week ahead of time
- Final – 29%
 - Dec 8, 8:00-10:00 AM in this room
 - DO NOT leave campus before this final
- All exams open book, open notes

Keeping Up

- Very fast until first midterm.
- If you keep up for the first month, you will be fine.
- If you don't, you will be in trouble.

Weekly activities

- Lecture – 3 hours
 - If you have a laptop, maybe try typing along.
- Discussion section – 1 hour
 - Bring laptops
- Lab hours – 10 hours, optional
 - For help with programs.
- Office hours – 1 hour, optional
 - Administrative things. I will not help you with your program during office hours.

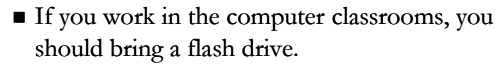
Lab Hours

- We have open lab hours in the 2020 SLB, a “computer classroom”.

M 12-2 Kefeng Tan
T 11-1 Kelcey Chan
W 11-1 Kefeng Tan, Kelcey Chan
R 1-3 Vishal Ahuja
F 3-5 Vishal Ahuja

- Sometimes in use by other classes
- Python also in 75 Hutchinson, an Open Access Lab, and 1131 Meyers (for ECS 15).

- ECS 10 geography



- I am expecting professional, adult behavior
- Politeness
 - No eating in class
 - No phone calls
 - “Business letter” emails
- Honesty
 - Write and understand every line of every program
 - No cut-and-paste
 - No looking at other people’s programs while typing

- First assignment due evening of Wds 10/1
- Get on a computer and start Web browser
- Find first assignment on course Web site:
<http://www.cs.ucdavis.edu/~amenta/f08/ecs10.html>
(can get there from myUCDavis)
- Start using Python

- Link to Python download page and directions on course Web site
- We can help during lab hours if you have a laptop

- Look at the first assignment on the Web page
- Install Python on your computer OR go to the lab and log on and try starting Python
- Get the book and read the first 11 pages while sitting in front of a computer and typing along.

Announcements

- No sections met this week
- Lab hours and sections starting Monday
- I will be at Tu 11am lab hour
- My office hour is W 2pm. Administrative issues only.