CMPS101
Algorithms and Abstract Data Types
(No) Devices

- (Unless you have approval from the DRC)

- Disable your phone, laptop, palmtop, e-reader, blackberry, strawberry, apple, orange,...
Me

- C. Seshadhri (sesh)
  - Faculty in computer science
- sesh@
- E2-347A
- Mon, 3-4 (please email)
TA 1

- Andrei Ignat

- aignat@

- Office hour: Thu, 11-12, E2-480

- Discussion: Tue, 9-10:30, Soc Sci 1
TA 2

• Lena Reed

• lireed@

• Office hour: Tue, 1-2, E2-480

• Discussion: Tue, 5-6:30, BE 105
TA 3

- Kivanc Yazan
- kyazan@
- Office hour: Wed, 11-12, E2-480
- Discussion: Wed, 5-6:30, BE 105
Basic structure

• Lectures MWF 2-3 (here)
  – Please attend
  – But you're an adult, so no enforcement

• Each of us has one office hour

• Each TA leads 1.5 hour discussion per week
  – Do attend for any clarification
Online material

- Course webpage
  https://users.soe.ucsc.edu/~sesh/cmps101-16/index.html
  - Has lots of stuff (slides, information, homeworks, etc.)
  - Please look at it before asking questions!

- Piazza
  http://piazza.com/ucsc/spring2016/cmps101

- Webcast
  https://webcast.ucsc.edu
Grading

- Assignments 50 points
- Midterm 20 points, Final 30 points
Assignments

• About one a week, at least a week to submit
• All assignments in groups of 2
  – Will remove 1 point for single submissions
• Programming assn
• Theory assn

• Will choose best (n-1) of n assignments
• No late submissions
Git

• All submissions through git
  – Git is a version control system, that's awesome!

• Submit both programs and theory assignments through git

• Git guide on Piazza

• Use first few discussion sessions for git issues
Homework

- Programming: Python3, and only Python3
  - I recommend local install, if possible
- Info in Piazza guides
- Assignment involves writing a full program

- Theory: use LaTeX (not enforced)
  - Neatly written is ok
- Submit pdf or scanned version through Git
Communication

- Use Piazza
- Use Piazza
- Use Piazza
- Email me only for scheduling
- Email TAs only for scheduling, grading
- Other questions? Use discussion sections or office hours
Stuck?

- Check the Piazza guides

- Use Google
- Use Google
- Use Google
Is computer Science?

Computer Science is no more about computers than astronomy is about telescopes.

-Edsger Djikstra
Data structures

• How to store “information” (data) in such a way that we can “access” it?

• Can we talk about this mathematically, and also relate to actually doing this?
The mathematics of computing

- How to formally/mathematically talk about computer programs?

- How to mathematically talk about “solving problems”?

- How to reason about “better algorithms” for problems?
The soft skills

- Writing full fledged program for real problems
- Using git
- Programming in pairs
- LaTeX
Most importantly...

- Getting stuck!

- Figuring stuff out, yourself!

- Debugging code, yourself!

- The amazing benefits of the Internet
  - stackexchange
Tasks for next few days

- Check out course website
- Check out Piazza
- Set up Python3

- Get git going!