Getting Involved in CS

Overview

- Demystify stereotypes
- What Berkeley has to Offer
- Getting "noticed"
- How to reach out
- Resumes
- Internships
- Summary

Breaking Barriers

- I'm under-experienced.
- I haven't taken enough classes.
- I haven't been programming since the age of 6.
- I don't have content to create a resume (or have one at all...).

Life After CS10

- The "61 Series"
  - 61A – More intro, you know a lot of it already! (Python)
  - 61B – Projects, core CS-concepts (Java)
  - 61C – Low level details, processors etc (C, MIPS)
- 3.0 technical GPA for lower-division classes to apply for the CS/EECS Major (B average).
- i-School has plenty of classes as well
  - Web Development, Cyberlaw, Tangible UI
- CS194 classes
- Grad-Level Classes
  - Not restricted to only grad students, and applies to all departments
- DeCals

Major vs. Minor (L & S)

Major

- Pre-reqs
  - Math 1(AB)
  - CS61(ABC)
  - Math 54
  - CS70
- EE40 OR EE20
- 20 units of upper-div CS (8 of which could be EE)
  - Design Requirement
- 7 units of tech electives
- Total: 15-17 core classes

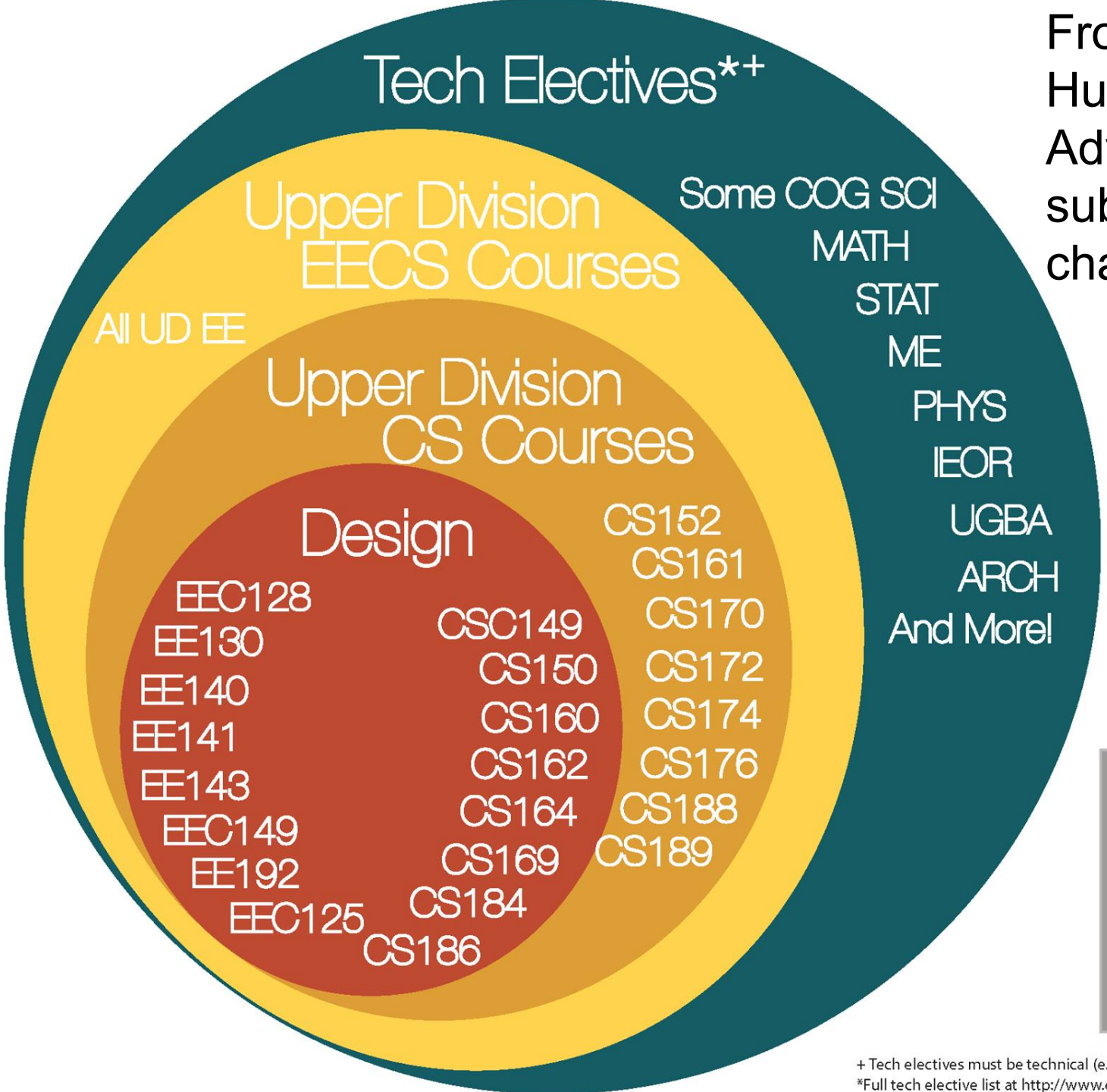
Minor

- Math 1(AB)
- CS61(ABC)
- CS70
- Any 3 CS upper-divs
- Total: 9 core classes

Note: No priority enrollment in upper-divs

More Info

From Christopher Hunn, the CS Advisor (This is subject to change!)



Take:
1x Design
2x CS
2x EECS
2x Tech Electives

+ Tech electives must be technical (e.g. IEOR Seminar doesn't count)
*Full tech elective list at http://www.eecs.berkeley.edu/csugrad/tech_electives.shtml

Major vs. Minor (EECS)

Major

- Math 1(AB)
- Math 53 & 54
- Physics 7(AB) + 1 more natural science course
- EE20
- EE40
- CS61(ABC)
- CS70
- Any 5 upper divs
- Total: 18 core classes
- Other General CoE Req's (Humanities, Ethics, etc.)

Minor

- Math 1(AB)
- EE20
- EE40
- CS61A or E7
- CS61B OR CS61C
- 3 upper-division courses in EECS
- Total: 9 core classes

More Info

L&S CS vs. EECS

- L&S CS requires no physics and (slightly) less math and EE classes
- Transfer into College of Engineering is possible, but incredibly rigorous
- You don't lose anything by sticking with L&S CS! Unless you have primarily EE interests (but you can still take EE classes!)
- With new changes to L&S CS there is even less difference! (15 of 27 CS units can be EE)
- Companies/Grad Schools/etc. don't care if you have a BA (L&S CS) or a BS (EECS)

Best Website Ever

http://www.eecs.berkeley.edu/Scheduling/CS

- Schedule of classes being taught for current and upcoming semester.
- Draft schedule of academic year, what's being offered and who is teaching it.
- Schedule rarely deviates from draft.

Getting Noticed

- How can I get professors to notice who I am?
  - Office hours
  - Talk to them (before/after lecture)
  - Schedule meeting outside of class / office hours
  - Email
- What distinguishes me from everyone else?
  - Show enthusiasm
  - Leadership and effective communication
  - Participate (in-class, Piazza)

Getting Involved in Academia

- Research!
  - URAP
  - ResearchMatch (researchmatch.heroku.com)
  - Your favorite research area
    - Purely CS? Biology? Math? Art? Patents?
- How to get involved with less experience?
  - Self-learning(HUGE)
  - Passion, enthusiasm
  - Lab Assist, Reader, TA
  - Tutor (ResHalls / Academic service centers)
  - Show off your other skills and assets!
- Research w/ Professor Dan Garcia
  - Ensemble, Gamescrafters, CS Illustrated

Getting Involved in CS10

- Multiple ways to get involved!
  - Lab Assistant (see @386 on Piazza to sign up!)
    - TA in Training (TAiT)
  - Reader
  - uGSI / TA
- Developing for…
  - Snap!
  - edX
  - Lab Content
  - Something new you want to add?

Pushing the Boundaries

- You can learn *anything* on the internet!
- Learning web development and doing side projects
- Self-learning (Google/Stack Overflow)
  - Project Euler
  - Code Academy
  - CodePath!
- Office Hours! (Make a TA happy and show up when there's no work due!)
- Emailing Professors
- Attending info-sessions (FREE FOOD!)
- Going to career fairs
- How can we generalize all of the actions above?

Resume

- Things to include:
  - Programming languages
  - Projects
  - Relevant CS, EE, and Math classes
  - Relevant skills
  - GPA (optional)
- Leadership, Work Experience
- Things CS companies really look at?
  - Past work/research Experience
  - Side projects (github)
  - Graduation Date
  - Leadership
  - Non-CS activities (depends on company/position)
    - Product Manager VS. Software Engineer

Internships

- Apply online
- Go to career fairs
- Research the company and departments that are interested in you
- Apply to as many as possible!
  - You never know until you try.
- Talk to friends and family.
  - Connections never hurt.

Interviews

- How can I get prepared for interviews?
  - glassdoor.com, careercup.com, etc.
- What if I get a question wrong on an interview? Should I panic?
- How can I differentiate myself from other applicants based on responses?
- Should I make myself sound as perfect as possible on my resume/application?

What Companies Really Care About

- Number one: Technical Skill
  - What if I don't have that much technical skill?
- Grades vs. Passion vs. Experience
- Passionate, enthusiastic student
- Going above and beyond to learn new things on my own
- Berkeley vs. Stanford Student example

Groups / Events / Communities

- Plenty of Groups:
  - Hackers@Berkeley
  - Berkeley Innovation
  - HKN/TBP/UPE
  - Innovative Design
  - CSUA
- Startups!
  - Skydeck
  - CET
- Non-CS groups need CS people too!
  - The Daily Californian, Rescomp, artists, etc.
- Hackathons
- Designathons

Summary

- Do things outside of class!
- Pursue your interests
- Don't give up after rejection
  - "Fall seven times, stand up 8"
  - CS is challenging but rewarding
- Hard work will pay off!