

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 of my resume to create one (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 or Minor (B average).
- Upper Divs
- 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

Major vs. Minor (L & S)

Major

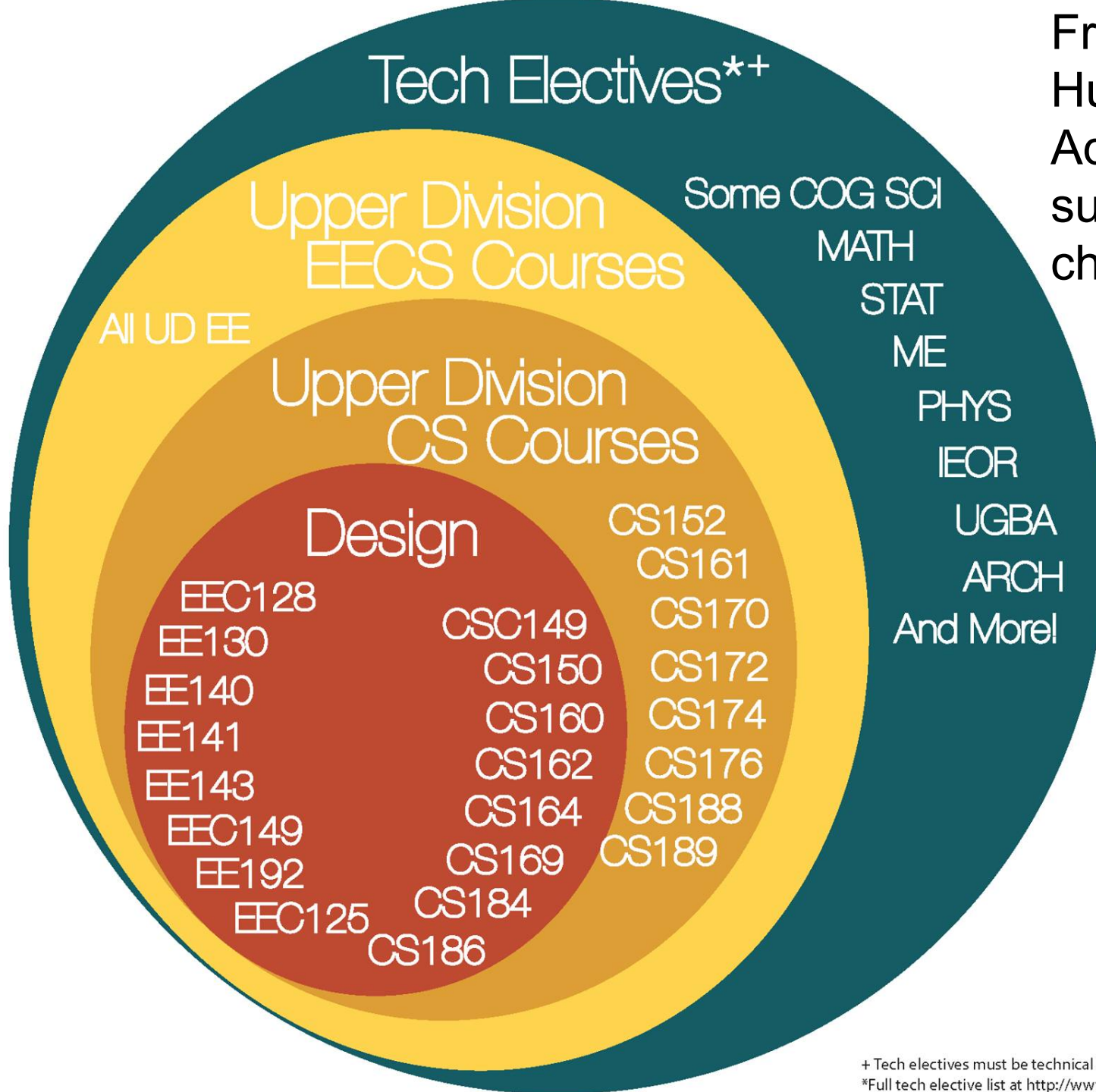
- Math 1(AB)
- CS61(ABC)
- Math 54
- CS70
- EE40 OR EE20 (16A/B)
- 20 units of upper-div CS (8 of which could be EE)
 - Design Requirement
- 7 units of tech electives
- Total: 15–17 core classes

Minor

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

[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
- (EE16A, B)
- 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
- (EE16A, B)
- 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! 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)

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)
- Not only computer science!

Getting Involved in Academia

- Research!
 - URAP
 - ResearchMatch (researchmatch.herokuapp.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
 - 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
- 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?

Résumé

- 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
- Going to career fairs
 - collect all the dropbox t-shirts!
- 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 n times, stand up $n + 1$ "
 - CS is challenging but rewarding
- Hard work will pay off!

Any Questions?