

Fall 2025

# CS 109: What's Next? Career Possibilities

From the Think Lab Team:

Dr. Devangi Parikh, Dr. Alison N. Norman, Ms. Michaela Cicero, Ms. Claudia Trevino

### CS109: Where are we?

Late semester

Registration is now

Career prep is coming

Think Faire is coming

Then finals (not ours!) and you are done!

# Things You Need to Know

- Adding classes late
  - Getting caught up is on you
  - Sometimes you should check before adding
- Canvas and your faculty
  - Assume benign neglect

### What's Next?

Career Possibilities

# Three Things to Consider

- 1) What you work on
- 2) What that work looks like
- 3) Where you work on it



### 1) What You Work On

### What You Work On

What part of Computer Science do you like best? Or in your top three? Or ...

How do you find that part of Computer science?

- Academics: upper division electives, Concentrations, degree type (BS or BSA)
- Extracurriculars: student orgs, attending talks, FOCS events

### 2) What that Work Looks Like

### What that Work Looks Like

- 1) Developers, Analysts, and Designers
- 2) PM
- 3) Researcher
- 4) Teacher

### **PMs**

What is a PM?

It depends on the company.

Project Manager, Product Manager, Program Manager, ...

If you are interested in these roles:

- -look for related internships
- -conduct informational interviews with people in industry
- -do a lot of group work
- -join a student org that gives you experience



### Researcher

Research is a process to discover new knowledge—pushing the boundaries of existing knowledge.

- This is not creating new software
- This is discovering or improving
  - Methods to create software,
  - Systems abstractions,
  - Algorithms,
  - ...

### How Do I Try Research?

- CS 118H Introduction to CS Research
- DiRP (Directed Reading Program)
- CS 370 Independent Study
- CS 374H Advanced Undergraduate Research
- CS 379H Computer Sciences Honors Thesis

### Teacher

- · K-12
  - Certification needed
- Community College
  - Master's needed
- 4-year colleges/universities
  - All require Master's, many require Ph.D.

# K-12: Getting Certified UTeach certificate!

What's UTeach

The UTeach program is a close-knit community that allows you to explore the teaching profession and gain a secondary STEM teaching certification by the time you graduate.



Schedule an advising appointment today!

Works well with both the BSA and the BS



# TRY OUT TEACHING WITH UTS 101

### **UTS 101**



1-credit hour course



Teach Austin-area elementary students



Serve your community through STEM

### **UTEACH PROGRAM**



Transcript-recognized certificate



Exclusive scholarships & internships



Open to ALL majors



# uteach Info Sessions!



Come learn more about UTS 101, the first step to adding a secondary STEM teaching certification by the time you graduate!

Scan to RSVP



## 3) Where You Work On It

### Where You Work On It

- Industry
- Academia
- Government
- Non-profits

### Learning About Academia

Look around you.

And ask us:)

Or any faculty member!

### Learning About Non-Academia

[And preparing for the career fair...]



### Common STEM Career Paths

#### Academic

- Principal investigator in a research-intensive institution
- Research staff in a research-intensive institution
- Combined research and teaching careers
- Teaching-intensive careers in academia
- Research administration
- University administration

#### Communication

- Science education for non-scientists /science outreach.
- Science writing
- Science policy

#### Industry

- Research in industry
- Sales and marketing of science-related products
- Support of science-related products
- Drug/device approval and production
- Scientific/medical testing
- Data science & software development

#### Education

- Science education for K-12 schools
- E-learning & instructional design

#### Government

- Public health related careers
- Science policy
- Conservation
- Drug/device approval
- Scientific/medical testing
- Research & development
- Research administration

#### Intellectual property

- Patent law
- Technology commercialization

#### Nonprofit

- Conservation
- Nonprofit management
- Research & development
- Data science
- Think tank

#### Clinical

- Clinical research management
- Clinical practice

#### Business

- Business of science
- Finance
- Entrepreneurship

### A Bit About Graduate School

Essentially required to work in certain subfields right now (ML, for instance)

Required to work in certain locations (academia, most national lab positions, most research positions)

#### **Degree Options**

- Master's: coursework or thesis options, typically two years, certifies that you know the material at a deeper level
- Ph.D.: requires a dissertation, must contribute to the knowledge of the field, certifies that you are ready for independent research

#### Finances

- Master's: you typically pay the tuition, fees, etc. unless you receive a TA or RA position
- Ph.D.: typically paid with a monthly stipend and tuition and fees are covered. Most places guarantee funding for some number of years, but in practice you never pay

### A Bit About Rec Letters

- Needed for scholarships, grad school applications, and a seemingly infinite number of causes
- So... get to know your faculty!
- · Writers need to be:
  - Experts in the field
  - Familiar with you and your work
  - Plugged in to the community

### No Matter What Skills

- Continuous learning
- Critical thinking
- Problem solving
- Communication
- Collaboration

- Process management
- Accept feedback
- Manage emotions
- Conflict resolution

## How do you decide?

- Try it all!
- Be curious
- Talk to people
- Do not rule out an option based on rumor

# Trying it all...

- Get internships
  - Watch for FoCS events
  - Network
  - Attend career fair!

- Explore research
  - CS 118H
  - Directed ReadingProgram (DiRP)
  - CS 370/374H/379H (after 429)
  - Research Experience for Undergraduates (REUs)

# Mentoring Team

- Seek multiple mentors each with different
  - perspective on you
  - expertise
- Mentors may have ideas that you may not consider
- Help you correct and redirect

# Story Time: dnp's career path

Take away:

You can always change!

# Story Time: ans's career path

Take away:

Make them tell you "no".

Don't turn you down for them!

# Steps to Take Now

- Register carefully
- Join student orgs
- Attend FoCS events
- Keep your resume updated
  - Note that a curriculum vitae (CV) is an academic resume
- Create an elevator pitch

In other news...

Think Faire is soon!



### Steps to a Successful Think Faire

- 1) Have an approved proposal
  - a) Revisions are due on 11/16
- 2) Create a Pecha Kucha for submission
  - a) Draft due on 11/23
  - b) Should have slides and your script
  - c) Practice before submitting
- 3) Refine based on feedback
- 4) Present!

### What is a Pecha Kucha?

# Coming Up

Assignments due:
Think Faire Proposal Re-submit
Career Reflection

Next week: Attend discussion section!

# Coming Up

Career Fairs & Elevators
Think Faire

# Thank you for coming!

It was good to see you:)