# COGS 1: Winter 2020

**Section I, Week 10**

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Day</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Boyle</td>
<td><a href="mailto:mboyle@ucsd.edu">mboyle@ucsd.edu</a></td>
<td>Friday</td>
<td>2-4 pm</td>
<td>CSB 130</td>
</tr>
<tr>
<td>Tiffany</td>
<td><a href="mailto:tchokry@ucsd.edu">tchokry@ucsd.edu</a></td>
<td>Tuesday</td>
<td>12:30-1:30pm</td>
<td>PC Theatre Lobby</td>
</tr>
<tr>
<td>Bora</td>
<td><a href="mailto:bmutluog@ucsd.edu">bmutluog@ucsd.edu</a></td>
<td>Wednesday</td>
<td>4-5 pm</td>
<td>Geisel 2W Data GIS</td>
</tr>
<tr>
<td>Jon</td>
<td><a href="mailto:jahern@ucsd.edu">jahern@ucsd.edu</a></td>
<td>Tuesday</td>
<td>2-3pm</td>
<td>CSB 114</td>
</tr>
<tr>
<td>Bryan</td>
<td><a href="mailto:blt010@ucsd.edu">blt010@ucsd.edu</a></td>
<td>Thursday</td>
<td>1-2pm</td>
<td>Sequoyah 142</td>
</tr>
<tr>
<td>Corey</td>
<td><a href="mailto:yiz329@ucsd.edu">yiz329@ucsd.edu</a></td>
<td>Wednesday</td>
<td>1-2pm</td>
<td>CSB 231</td>
</tr>
<tr>
<td>Meri</td>
<td><a href="mailto:myedigar@ucsd.edu">myedigar@ucsd.edu</a></td>
<td>Tuesday</td>
<td>12:30 - 1:30 pm</td>
<td>PC 4th Floor</td>
</tr>
<tr>
<td>Ilmaa</td>
<td><a href="mailto:ilhaque@ucsd.edu">ilhaque@ucsd.edu</a></td>
<td>Monday</td>
<td>4-5:30pm</td>
<td>Audrey’s Cafe</td>
</tr>
<tr>
<td>Ana</td>
<td><a href="mailto:achkhaid@ucsd.edu">achkhaid@ucsd.edu</a></td>
<td>Wednesday</td>
<td>12-1pm</td>
<td>CSB 215</td>
</tr>
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Important Information

● Fill out your CAPES
  ○ We want your constructive feedback
  ○ If 3/4ths of the class fills it out, we will have a TA led Midterm 3 Review Session
  ○ Interesting article on CAPE biases

● Midterm 3 will be ONLINE
  ○ Available only on Thursday from 11 AM - 12:20 PM (during usual class time) - CANVAS

● Online Quiz
  ○ Quiz I will be released today at 6PM and will be available up until midnight on Friday WEEK 10
Last Week’s Topics

- **Lecture 15 | Dr. Philip Guo - UI/UX Job Searches**
- **Lecture 16 | Dr. Jim Hollan - A Glimpse into Human Computer Interaction**
Review Questions (1 of 3)

1. What is HCI?
2. What is UX/UI?
3. What types of jobs are there for HCI majors?
4. What do you need to get a job in HCI?
5. What is a portfolio?
   ○ What makes a good portfolio?
6. How can you make connections?
Review Questions (2 of 3)

7. How should you apply for internships?
   ○ What is a good way to prepare yourself for an internship?

8. When do you need graduate school for HCI?
   ○ A Masters
   ○ A PhD

9. What is “important thought time”?

10. What is the relation between HCI and Design at UCSD?
    ○ What is the relationship between HCI and COGS?
Review Questions (3 of 3)

11. How does technology shape our minds?
12. What are some important design innovations that have come from Dr. Hollan’s work?
13. How does design and technology impact society and politics?
   ○ What is a deep fake?
14. What makes computers special?
15. How should we study design?
16. What is a digital fast?
   ○ What can we learn from a digital fast?
What is HCI?

HCI = Human-Computer Interaction

- A super diverse and interdisciplinary field of study focusing on the interactions between users and computers and the design of the computer itself
- Often used in academia settings
- Somehow connected to Distributed Cognition that Dr. Scott’s lectures focuses on - using ethnographic methods to study how people interact with their environment based on what they do in real life
What is UX/UI?

UX/UI = **User Experience** / **User Interaction** Design

- **UX Design** focuses on user’s experience of the app while **UI Design** focuses on the graphical layout of the app itself.

- Job titles that often used in industry

- User experience is determined by how easy or difficult it is to interact with the user interface elements that the UI designers have created.
What types of jobs are there for HCI majors?

- **UX Researcher** - needfinding, user testing & experiments
  - often are master’s or PhD. graduates
- **Project Manager (PM)** - needfinding, team coordination
- **UX/Interaction/Product Designer** - non-code prototypes
  - Most common type of job for new college graduates
- **UX Architect/UX Prototyper** - design & some coding involved
- **Visual Designer** - art & graphics
- **Data Scientist** - involves writing lots of codes to analyze data
  - PhD focused
- **Front-end Developer** - involves writing lots of production code
What do you need to get a job in HCI?

Most important factors for maximizing the chances of getting an interview:

- Build up a design portfolio
- Lean hard on personal and alumni connections
- Get a design internship while in college
What is a portfolio? (1 of 2)

Compilation of *materials that exemplifies your beliefs, skills, qualifications, educations, training and experiences that provides insight into your personality and work ethic*

**Basics strategies to build a portfolio:**
- Start with a personal website
- Class projects with design components
- Find work/volunteering options, e.g. friends, student associations, etc.
  - Freelance designer for local companies/startups
  - Look beyond web/mobile apps - create posters, art pieces, event flyers, etc.
- Get design or other internships (and put them into your portfolio)
- Get inspiration from friends’/alumnis’ portfolios/resumes
What makes a good portfolio (2 of 2)

Advanced strategies to build up a portfolio:

- Include your (compelling and fresh) point-of-view
  - It should frame your work & make it stand out
- Be able to justify and critique your own process.
  - Justify what you did, how you did it, and why it matters
- Include improved existing projects if you did that type of work
  - In fact, that’s much closer to what you’ll do in your actual job
- Emphasize most relevant projects to your desired job roles
  - = Change your resume for different jobs
- If you can’t get into workforce right away - continue working on your portfolio, and get any job, perhaps unrelated to design
How can you make connections?

Connections are important!

- Don’t be shy about asking people!
- Cold-email alumni, especially recent alumni who put themselves on career advising lists
- Friends, family, dormmates, instructors, etc
- Your bosses from prior jobs/internships
- Most good jobs obtained via personal connections - Also use personal connections to critique your portfolio, resume, and cover letters
How should you apply for internships?

Portofolio + Connections → Internships

Basic interview prep:
● Walk through portfolio with friends
● Lots of interview prep resources
● Ideally put internship work in your portfolio
● If you can’t get internships, spend your summers building your portfolio in any way you can
Not everyone who wants to work in HCI/Design/UX should go into grad school

Good reasons to get a Master’s Degree:

- **Maybe:**
  - If your major is far away from HCI / Design
  - If you want to be a design teacher

- **Yes:**
  - If you don’t have a strong portfolio yet
  - If you can afford the tuition and time
  - If you want to be a UX Researcher
When do you need graduate school for HCI? (2 of 2)

Good reasons to get a PhD:

- **Maybe:**
  - If you want to be a UX Researcher
- **Yes:**
  - If you want to be a university professor
  - If you want to be a research scientist
  - If you want to be a data scientist
What is “important thought time”?

- It is time set aside to think about important thoughts that are not necessarily associated with your work.
- In Dr. Hollan’s case, him and his team would set aside important thought time to come up with a way to timestamp computerized documents.
What is the relation between HCI and Design at UCSD?

**Early Days:**
Institute for Cognitive Science
Parallel Distributed Processing
**User Centered System Design**

**Today:**
New Design Lab
Focused on **Complex Socio-technical Systems**

**HCI/Design Faculty:**
- Steven Dow
- Philip Guo
- Jim Hollan
- David Kirsh
- Scott Klemmer
- Don Norman
- Taylor Scott

**Highlighted HCI/Design Courses:**
- DSGN 1: Design of Everyday Things
- COGS 10: Cognitive Consequences of Technology

All Ques.
What is the relationship between HCI and COGS?

- Design influences our perception of things and our cognitive process
  - Virtually everything we see is designed
- We examine not only the visible features of designed objects but also the less visible features of process and interaction
- Important data revolution: capture real-world activity through the use of activity for scientific scrutiny
How does technology shape our minds?

● Technology creates a bubble to where we only hear one side of things

● **Digital Fast**
  ○ Go 24 hours without your computer/phone
  ○ People report their hands and time feeling empty without their phones
  ○ Have more time to interact with other people
What are some important design innovations that have come from Dr. Hollan’s work?

- **Xerox Parc and the Alto**
  - Xerox should become the “architect of information”
  - Alan Kay, “The best way to predict the future is to invent it”
  - Parc Legacy: personal computer, ethernet, laser printing, object oriented programming, etc.
How does design and technology impact society and politics?

Design and technology could be used to influence the political landscape, such as with the example of the stolen NSA technology and deep fake technology, as they could be used to influence the image of a politician.

- A deep fake is a manipulated video showing a person saying things they never said.
What makes computers special?

Computers reinform the ways we think

New medium for representation that offers more plasticity

Changing forms of computers

The monolithic computer is being reassembled in new forms

Our activities are increasingly mediated by computers
How should we study design?

- People’s interaction with technology should be looked at first when observing the aspects of interactive design.
- Start with people and see what they do and how they interact in their environments.
What is a digital fast?

One of the assignments in COGS 10 where the students need to **undertake electronic media fast in which they abstain from using any form of digital media for 24 hours.**

- The goal of this project is for students to experience what a day of life is without electronic media (e.g., cell phone, laptop, PC, tablet, tv, etc.) and the activities these media enable (e.g., texting, email, Facebook, internet and web access, etc.)
Thank You!