CSC592: Special Topics— Human Computer Interaction

Instructor: Krishna Venkatasubramanian

About Me

Joined URI: Fall 2019

PhD: Arizona State U

- Most recently at: Worcester Polytechnic Institute
- Research interests:
 - Cybersecurity
 - Human-computer interaction
 - Accessibility for folks with physical/intellectual disabilities
 - Tech for marginalized population
 - Wearable technologies
- Pronouns: He/Him/They

Course Details

- Class Sessions
 - Wednesday 5:30pm 8:15pm
 - Location: Tyler Hall

- Instructor: Krishna Venkatasubramanian
- Contacts
 - krish@uri.edu
 - Tyler 131
- Office Hours
 - By appointment only

Course Website

https://calhobbes.github.io/csc592-s20/

Textbook

- There is no Textbook for the class
 - All readings will be explicitly assigned
- Check syllabus for reading for each week
- Course Description:
 - This course is a broad graduate-level introduction to Human Computer Interaction (HCI) and HCI research. The course covers seminal works and current research in topics, areas, and methods associated with designing interactive systems.

Learning Objectives

Understanding the main elements of designing user interaction with computing systems

 Learning about areas, methods, and techniques associated with HCI

Learning how to do research in the area of HCI

Learning how to read and analyze research papers

Elements of the Course

Class Discussions

- We cover a variety of topics in this class.
- Students will lead the discussion for all research papers covered in class

Critiques

- Involves writing a 150-200-word critique of every research article assigned for that class.
- All critiques are individual assignments

Research Paper Discussions

- Research papers covered in class will be assigned to a student. This student will lead
 a discussion the paper in the class
- The discussion should last 50 minutes (with Q/A).

Research Project (semester long)

- Students are expected to form teams of 1-2 people and conduct an HCI research project
- More details of the topics of the is given in the syllabus on the course webpage.
- This project will involve three in-presentations and a project report at the end (see course webpage)

Critiques

- 150-200 words
- Please do not summarize the article. That's not the point. You have to take a position and say something about the article.
- One way of structuring the critiques might be: (1) write the main thesis
 of the paper in your own words, (2) describe 1-2 points about the paper
 you liked, (3) describe 1-2 points about the paper that could be
 improved.
- The critiques are due by 4pm on Wednesdays by email.
- First critique due Feb 5.

Research Paper Discussions

- From Week 3 onward, 2 to 3 research papers will be discussed in class.
- The students who lead the discussion in class do not have to write a critique for the paper they are leading.
- So, for a Wednesday evening class presentation of a paper the assigned student will read the paper and prepare a <u>50-minute</u> <u>discussion</u> (including Q/A).
- Your presentation will be evaluated based on four criteria (1) Quality of the presentation, (2) Quality of the slides, (3) Depth of material covered, (3) Level of discussion encouraged, (4) Duration of the presentation

Research Paper Discussions

- The goal is not just to make a presentation but also to lead a discussion on the topic, which means asking questions about the paper.
- If the paper assigned in not long enough a 1-hour discussion, then it's the presenter's responsibility to include more relevant material to make the discussion fill the time
 - For example, you could consider newer work in the area, follow-up work by the authors etc.
- Students will lead 3-4 research papers in the class
- Paper assignments will be done by me once the class population has stabilized

Research Project

Can of many types (not an exhaustive list)

- perform need-finding -- performing qualitative and quantitative studies to figure out the need for a technology and its important features
- **design activity** -- designing a specific technology (or updating an existing technology) based on the needs of the user, user involvement in evaluating the design is of course necessary
- participatory design -- designing with a specific user group who are the ultimate customers of the technology
- prototype evaluation -- prototyping a technology and evaluating its efficacy
- performing an evaluation -- performing a user evaluation of an existing technology
- verifying the results of a paper -- if you have a high-quality research paper you can re-do the experiment in the paper and provide a comparative analysis of your work vs. the original paper. For instance, it might be useful to see how technology design, perception, use etc., has evolved especially for old papers.

Project Timeline

- Feb 5 -- team formation
- Feb 12 -- project title + description
- Feb 19 -- initial presentation (provide an overview of the project, perform detailed literature review, and define exactly what you intend to do)
- Mar 25 -- progress report
- Apr 22 -- final presentation + final report due

Grading Policy

Final grades will be computed as follows:

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# 20% - Critiques# 30% - Research project presentations# 25% - Final Report# 25% -- Research Paper Discussion
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- Only exceptional work in the class gets an 'A'.
- Also, I calculate grades only toward end of the semester. So if you ask me "what my grade is" in the middle of the semester, I usually don't have an answer for you – unless you have been doing very well or very poorly!

Institutional Review Board (IRB) approvals

 If you are going to publish your work, you will need to get to Institutional Review Board (ethics board) approval for your project doing any user-studies.

 Even if you don't intend your project to be published, but you intend to showcase your work in URI-specific events, you need to different kind of approval with the IRB office.

- Every team is expected to talk to me about their project and their IRB approval needs.
 - I can help you with obtaining an approval

CITI Training

- As part of your IRB paperwork you need to submit an ethic training certificate. It is called CITI training. There are many different types of trainings available. You need to complete the following.
 - CITI Human Subjects Research (HSR) and
 - RCR for Social/Behav/Ed Researcher program.
- You need do both these trainings online (it's free for URI students).
- The link to URI's CITI training page is on the course webpage
- Please email me the certificates you get as a result. You have to get 75% on the quizzes before you pass and get the certificate. If you fail, you can retake the training.
- Please send me your certificate by Feb 5, 2020. These take time to do, so please start working on them as soon as possible.

Disability Accommodations

 Any student with a documented disability is welcome to contact me as early in the semester as possible, so that we may arrange reasonable accommodations.

 As part of this process, please be in touch with <u>Disability Services for Students Office</u> (http://web.uri.edu/disability/aboutdss/).

Academic Honesty

- Discussions with others to understand general assignment and class-related concepts are strongly encouraged (OUTSIDE THE CLASS, OF COURSE).
- However, all written work should be your own.
- Students are prohibited from accessing or comparing critiques, research reports with those of other students prior to submitting them
- Copying another individual's critiques, reports or presentation is plagiarism, a serious offense, and the one most common in computer science courses.
 - Anyone that provides assignment to another individual is also guilty of academic dishonesty.
 - Both will be prosecuted in accordance with the <u>University's Policy of Academic Honesty</u>.
- If you do not have sufficient time to complete an assignment, then submit a partial writeup.

Late Submissions

No late submissions are allowed.

 Exceptions include extenuating circumstance and religious observance.

 If you are going to miss deadline and you have valid reason, please inform me in writing (i.e., email) ahead of schedule!

Emails

- All official communication for you will come through Email
- If you email me please include [CSC592] in the subject line, otherwise, I cannot guarantee reading your email
- If you email me, I may take up to 24 hours to respond. If you email me on Friday, 24 hours is defined as Monday!
- Please don't email me a few hours before assignment deadlines to ask for extension or expect me to respond immediately.

URI Religious Holidays

• It is the policy of the University of Rhode Island to accord students, on an individual basis, the opportunity to observe their traditional religious holidays.

 Students desiring to observe a holiday of special importance must provide written notification to each instructor.

 Complete list of holidays observed can be found here: http://www.interfaith-calendar.org/

Things to remember

- Finish CITI training and send me certificates, if you have not done so already
- Form a team of 1-2 students + think about projects to do
- EMAIL ME
 - Send me team info by Feb 5, 2020
 - Send me project topic by Feb 12, 2020
- First research project presentation Feb 19, 2020
 - (more details forthcoming)

Things to remember

- First critiques due Wednesday, Feb 5
 - You will be writing a critique for 2-3 research papers every week
 - Unless you are presenting one of the papers

 Research paper presentation by students also starts Wednesday, Feb 5