

CMSC388L
Readings in HCI Research: CHI2019

Prerequisites: CMSC216, CMSC250

Credits: 1

Time and location: TBA

Instructor: Dr. Evan Golub

Course Facilitators: Selena Alvarado, Justin Goodman

Course Description:

In this course, most weeks students will read a particular research paper from the leading conference in Human-Computer Interaction, CHI2019, prepare in some way, and then participate in an in-class discussion. During the discussion, the key elements of HCI mentioned in the paper will be highlighted, and things like potential follow-up project ideas will be explored.

Some Student Goals

- To gain a more expansive picture of the variety of HCI research topics and techniques.
- To gain experience in verbally discussing technical concepts and techniques.
- To understand the relevance of HCI principles, and be able to implement these concepts into future projects.
- To consider the human side of computer science when developing future applications.

Resources (accessible while on campus - can download class papers and read later):

Proceedings of the 2019 CHI Conference <https://dl.acm.org/citation.cfm?id=3290605>

Best Papers <https://chi2019.acm.org/2019/03/15/chi-2019-best-papers-honourable-mentions/>

Anticipated schedule: *Each week starting Week 1, by the end of class students will be assigned one paper to read for the next class session, and then:*

- *By Wednesday, they must submit an individual “journal response” on ELMS by 11:59 PM reacting to the paper (guidelines will be provided regarding the form of these journal responses).*
- *Also by Wednesday, they must complete a related quiz on ELMS by 11:59 PM.*
- *On Friday, in class, students and facilitators will be involved in a discussion on the assigned paper. Active participation is expected.*
- *By the Sunday after the discussion, if the student is going to use that paper for one of their 6 post-class “reflection” write-ups based on the paper and the in-class discussion surrounding the paper, it needs to be in by 11:59 PM.*

| Week | Paper (subject to change if needed) |
|-------------|--|
| 01 (Jan 31) | An overview exploring “How to read a paper” and a general introduction to Human-Computer Interaction as a field. No pre-class quiz or journal, but there is a reading. How to Read a Paper |
| 02 (Feb 07) | Project Sidewalk: A Web-based Crowdsourcing Tool for Collecting Sidewalk Accessibility Data at Scale https://dl.acm.org/citation.cfm?id=3300292 |
| 03 (Feb 14) | BBeep: A Sonic Collision Avoidance System for Blind Travellers and Nearby Pedestrians https://dl.acm.org/citation.cfm?id=3300282 |
| 04 (Feb 21) | Experimental Analysis of Barehand Mid-air Mode-Switching Techniques in Virtual Reality https://dl.acm.org/citation.cfm?id=3300426 |
| 05 (Feb 28) | <p><i>Students will be given 3 choices the previous week and vote on which of the papers the class will read for this week.</i></p> <p>Selected Paper: Trolled by the Trolley Problem: On What Matter for Ethical Decision Making in Automated Vehicles https://dl.acm.org/citation.cfm?id=3300739</p> |
| 06 (Mar 06) | Geollery: A Mixed Reality Social Media Platform https://dl.acm.org/citation.cfm?id=3300915 |
| 07 (Mar 13) | Voice User Interfaces in Schools: Co-designing for Inclusion With Visually-Impaired and Sighted Pupils https://dl.acm.org/citation.cfm?id=3300608 |
| 08 (Mar 20) | Human-Centered Tools for Coping with Imperfect Algorithms During Medical Decision Making https://dl.acm.org/citation.cfm?id=3300234 |
| 09 (Apr 3) | Managing Messes in Computational Notebooks https://dl.acm.org/citation.cfm?id=3300500 |
| 10 (Apr 10) | <i>Students will be given 3 choices the previous week and vote on which of the papers the class will read for this week.</i> |
| 11 (Apr 17) | <p><i>Only one item left? Heuristic Information Trumps Calorie Count When Supporting Healthy Snacking Under Low Self-Control</i> https://dl.acm.org/citation.cfm?id=3300708</p> <p>** Final Paper writing assignment will be posted **</p> |
| 12 (Apr 24) | "Occupational Therapy is Making": Clinical Rapid Prototyping and Digital Fabrication https://dl.acm.org/citation.cfm?id=3300544 |
| 13 (May 1) | ExerCube vs Personal Trainer: Evaluating a Holistic, Immersive, and |

| | |
|------------|---|
| | Adaptive Fitness Game Setup https://dl.acm.org/citation.cfm?id=3300318 |
| 14 (May 8) | Managerial Visions: Stories of upgrading and maintaining the public restroom with IoT https://dl.acm.org/citation.cfm?id=3300723 |

Grading:

Grades will be maintained on ELMS. Students are responsible for all material discussed in lecture and posted on the ELMS site, including announcements, deadlines, policies, etc. Final course grades will be determined according to the following percentages:

Active Participation (45%): Students must attend class and actively participate in the class discussion to receive full credit on participation.

Quizzes (20%): Each class will be preceded with a short ELMS quiz about the assigned reading for the week (deadline posted on ELMS).

Individual Journal Submissions (20%): As students read each paper, they will “journal” notes, comments, reflections, etc. and submit that on ELMS in advance of the discussion day (deadline posted on ELMS)..

Semester “Takeaways” Paper (15%): Due as an at-home final by the end of the officially-listed final exam time as it will appear on Testudo by mid-semester. As an example, students might be asked to write a paper reflecting on their favorite paper(s) from the course, and elaborate on an idea for a project that they have based on the paper. Details of the assignment will be given in class.

Office Hours:

Each facilitator will have an office hour posted each week.

Excused Absence and Academic Accommodations:

See the section titled "Attendance, Absences, or Missed Assignments" available at Course Related Policies.

Disability Support Accommodations:

See the section titled "Accessibility" available at Course Related Policies.

Academic Integrity:

Note that academic dishonesty includes not only cheating, fabrication, and plagiarism, but also includes helping other students commit acts of academic dishonesty by allowing them to obtain copies of your work. In short, all submitted work must be your own. Cases of academic dishonesty will be pursued to the fullest extent possible as stipulated by the Office of Student Conduct. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit <http://www.shc.umd.edu>.

All individual assignments/quizzes must be done individually. Please visit the PDF of the [UMD Code of Academic Integrity](#) for a detailed explanation of what constitutes academic dishonesty. Note that it includes not only cheating, fabrication, and plagiarism, but also includes helping other students commit acts of academic dishonesty by allowing them to obtain copies of your work. In short, all submitted work must be your own.

Cases of academic dishonesty will be referred to the [University's Office of Judicial Programs](#). If the student is found to be responsible of academic dishonesty, the typical sanction results in a special grade "XF", indicating that the course was failed due to academic dishonesty. More serious instances can result in expulsion from the university. If you have any doubt as to whether an act of yours might constitute academic dishonesty, please contact your one of the course instructors.

Excused Absence and Academic Accommodations:

Any student who needs to be excused for an absence from a single discussion day due to a medically necessitated absence shall, within 24 hours of the missed assessment, inform the instructor of the missed discussion day by using email or by using the "Report Absence" button on the grades server. Each note must contain an acknowledgment by the student that the information provided is true and correct. Providing false information to University staff is prohibited under Part 10(j) of the Code of Student Conduct (V-1.00(B) University of Maryland Code of Student Conduct) and may result in disciplinary action. The student is responsible for following up with the instructor and/or the TA to make sure they have all information missed from that day.

This self-documentation may not be used for any Major Scheduled Grading Events, defined below, and it may only be used for only 1 discussion day during the entire semester. Any student who needs to be excused for a prolonged absence (2 or more consecutive class meetings), or for a Major Scheduled Grading Event, must provide written documentation of the illness from the Health Center or from an outside health care provider. This documentation must verify dates of treatment and indicate the timeframe that the student was unable to meet academic responsibilities. In addition, it must contain the name and phone number of the medical service provider to be used if verification is needed. This documentation must be given to the instructor within a week of the student's return to classes.

The **Major Scheduled Grading Events** for this course include the weekly quizzes and journal submissions, and the final paper.

At the time the instructor is informed about an excused missed quiz or journal, arrangements can be made regarding it in terms of an appropriate extension to the deadline.

It is also the student's responsibility to inform the instructor of any intended absences from exams or class for religious observances or official University events during the first two weeks of the semester.

Disability Support Services:

Any student eligible for and requesting reasonable academic accommodations due to a disability is requested to provide, to the instructor in office hours, a letter of accommodation from the Office of Disability Support Services within the first two weeks of the semester and the arrangements for individual exams must be made with the instructor at least one week in

advance.

University Policies:

There are general [course related policies](#) at the University with which you might want to become familiar.

Course Evaluations:

If you have a suggestion for improving this class, don't hesitate to tell the instructor or course facilitators during the semester. The Department of Computer Science takes the student course evaluations very seriously. Evaluations for the Fall will usually be open during the first two weeks of December. Students can go to www.CourseEvalUM.umd.edu to complete their evaluations (usually in the last two weeks or so of the semester). Your comments will help make this class better.