Human-AI Interaction

Course number: INF 385T
Unique ID: 27650
Time: 3pm-6pm Mondays
Location: UTA 1.204

Instructor: Min Kyung Lee (Pronouns: she, her)
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Office hours: Via email and by appointment

Description
Advances in artificial intelligence (AI) have changed the way decisions are made in organizations, governments, and everyday life. This course will provide an introduction to combining human and machine intelligence to benefit people and society. Students will learn cutting-edge research on a number of topics related to human-AI interaction, including the psychological and societal impacts of AI, AI biases and fairness, transparency and explainability, mixed-initiative interaction, human-in-the-loop decision-making, embodied and natural language based AI, and design guidelines and methods for AI user experiences. These topics will be explored in the context of real-world applications, including online social media and labor platforms, algorithmic management tools for worker hiring and evaluation, and decision-support tools for public administrative decisions on risk assessment and resource distribution. Students will form interdisciplinary teams and learn through projects how to critically analyze existing AI systems, study their human impact, and design new systems to be human-centered.

Note: This course is about human-centric theories and methods for envisioning AI systems and will provide no technical insight on machine learning, data-mining, or statistical pattern recognition. Prior experience with programming, AI/machine learning, human-computer interaction or interaction design, or user research is not required but will be helpful. The methodological skills required for projects will be covered in the class.

Course Requirement

Required Materials: All course readings will be available via the course Canvas site.

Required Devices: You need access to computers to download and print the readings and complete the assignments.

Classroom expectations: Please make sure to be engaged and respectful, and to contribute to discussions.

Assignments

1. Attendance & active participation. Students are expected to attend every class. Every student should demonstrate ongoing engagement in class discussions. Absences will only be excused in situations following university policy (illness, religious holy days, participation in University activities at the request of university authorities, and compelling absences beyond your control) with proper documentation and timely notification (prior to class for non-emergencies).

2. Reading reflections. Before 2 pm on Fridays (except the first week and last week), you will submit three discussion questions about the assigned readings via the provided Google doc. You will then read all the questions submitted by your classmates and vote for the questions that you'd like to discuss in the class by 3 pm on Fridays. The reading panel teams will include the questions with the most votes in the class discussion.

3. In-class reading panel participation. You will be part of the reading panel twice in the semester. The panel will consist of 2-3 students, and will lead an in-class reading discussion for about 30 minutes. You will prepare 1-2 slides to briefly summarize the papers. Then, you will pose questions, including the most voted reading reflection questions and your own. Prepare your own thoughts in response to these questions to set the stage for discussion.

4. Term Project. You will work in teams of three or four to conduct a term project. The first phase of the project will focus on understanding experiences with AI and the second phase will focus on designing human-AI interactions. Detailed guidelines will be distributed with weekly assignment instructions.

Grading for this course

Assignments	Percent of Total Grade / Points Possible
1. Attendance & active participation	10%
2. Reading reflections	15%
3. In-class reading panel participation	15%
4.a. Project Part 1. Understanding experiences with AI	
Background literature survey & Problem formulation	5%
Data collection	5%
Analysis & findings	5%

Mid-term presentation	5%
4.b. Project Part 2. Designing human-AI interaction	
Opportunity mapping & concept ideation	5%
Concept definition and stakeholder value flow	5%
Scenarios and wireframes	5%
Prototype	5%
Final presentation & documentation	5%
Overall teamwork peer evaluation	5%

Grade Cutoff

A 94-100% A- 90-93% B+ 87-89% B 84-86% B- 80-83% C+ 77-79% C 74-76%

For detailed information about what grade is required for you to receive credit for this class, please refer to UT's Graduate Catalog. For example, students in the School of Information (iSchool) are required to receive a grade of B or higher in order to include this course in their program of work toward graduation. In addition, the UT Graduate School requires a minimum grade of C or higher to count a course for credit.

Course Outline
The detailed, up to date course outline is posted on canvas. Changes to the schedule may be made at my discretion and if circumstances require. It is your responsibility to note these changes when announced (although I will do my best to ensure that you receive the changes with as much advanced notice as possible).

Week	Date	Topic
Week 1	1/27	Introduction
Week 2	2/3	Perspectives on human-AI interaction
Week 3	2/10	Human experiences with AI in platforms, workplaces, and cities
Week 4	2/17	Designing AI user experiences
Week 5	2/24	Transparent and explainable AI

Week 6	3/2	Fair and responsible AI
Week 7	3/9	Designing AI with stakeholders
Week 8	3/16	Spring break
Week 9	3/23	Human-in-the-loop systems and human-AI collaboration
Week 10	3/30	Ethics in data
Week 11	4/6	Designing for failure
Week 12	4/13	NLP-based AI: Chatbots and voice agents
Week 13	4/20	Embodied AI: Robots and self-driving cars
Week 14	4/27	Work session / guest lecture
Week 15	5/4	Final Presentations

Policies

4.1. Classroom Policies

Statement on Learning Success

Your success in this class is important to me. We will all need accommodations because we all learn differently. If there are aspects of this course that prevent you from learning or exclude you, please let me know as soon as possible. Together we'll develop strategies to meet both your needs and the requirements of the course. I also encourage you to reach out to the student resources available through UT. Many are listed on this syllabus, but I am happy to connect you with a person or Center if you would like.

Absences

Excused Absence: The only absences that will be considered excused are for religious holidays or extenuating circumstances due to an emergency. If you plan to miss class due to observance of a religious holiday, please let me know at least two weeks in advance. You will not be penalized for this absence, although you will still be responsible for any work you will miss on that day if applicable. Check with us for details or arrangements.

If you have to be absent, use your resources wisely. Ask your team and other classmates to get a run-down and notes on any lessons you miss. If you find there are topics that we covered while you were gone that raise questions, you may come by during office hours or schedule a

meeting to discuss. Email specific questions you have in advance so that we can make the most of our time. "What did I miss?" is not specific enough.

4.2. Student Rights & Responsibilities
- You have a right to a learning environment that supports mental and physical wellness.
- You have a right to respect.
- You have a right to be assessed and graded fairly.
- You have a right to freedom of opinion and expression.
- You have a right to privacy and confidentiality.
- You have a right to meaningful and equal participation, to self-organize groups to improve your learning   environment.
- You have a right to learn in an environment that is welcoming to all people. No student shall be isolated, excluded   or diminished in any way.

With these rights come responsibilities:
- You are responsible for taking care of yourself, managing your time, and communicating with the teaching team   and with others if things start to feel out of control or overwhelming.
- You are responsible for acting in a way that is worthy of respect and always respectful of others. • Your experience   with this course is directly related to the quality of the energy that you bring to it, and your energy shapes the   quality of your peers' experiences.
- You are responsible for creating an inclusive environment and for speaking up when someone is excluded.
- You are responsible for holding yourself accountable to these standards, holding each other to these standards,   and holding the teaching team accountable as well.

Personal Pronoun Use (She / He / They / Ze / Etc)
Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name, unless they have added a "preferred name" with the Gender and Sexuality Center (http://diversity.utexas.edu/genderandsexuality/publications-and-resources/). I will gladly honor your request to address you by a name that is different from what appears on the official roster, and by the   gender pronouns you use (she/he/they/ze, etc). Please advise me of any changes early in the semester so that I may make appropriate updates to my records.

University Resources for Students

Services for Students with Disabilities
This class respects and welcomes students of all backgrounds, identities, and abilities. If there are circumstances that make our learning environment and activities difficult, if you have medical information that you need to share with me, or if you need specific arrangements in case the building needs to be evacuated, please let me know. I am committed to creating an

effective learning environment for all students, but I can only do so if you discuss your needs with me as early as possible. I promise to maintain the confidentiality of these discussions. Any student with a documented disability who requires academic accommodations should contact Services for Students with Disabilities at 471-6259 (voice) or 512-410-6644 (Video Phone) as soon as possible to request an official letter outlining authorized accommodations. For more information, visit http://ddce.utexas.edu/disability/about/.

Counseling and Mental Health Center
Do your best to maintain a healthy lifestyle this semester by eating well, exercising, avoiding drugs and alcohol, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress.

All of us benefit from support during times of struggle. You are not alone. There are many helpful resources available on campus and an important part of the college experience is learning how to ask for help. Asking for support sooner rather than later is often helpful.

If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support.
http://www.cmhc.utexas.edu/individualcounseling.html

The Sanger Learning Center
Did you know that more than one-third of UT undergraduate students use the Sanger Learning Center each year to improve their academic performance? All students are welcome to take advantage of Sanger Center's classes and workshops, private learning specialist appointments, peer academic coaching, and tutoring for more than 70 courses in 15 different subject areas. For more information, please visit http://www.utexas.edu/ugs/slc or call 512-471-3614 (JES A332).

Undergraduate Writing Center: http://uwc.utexas.edu/
Libraries: http://www.lib.utexas.edu/ ITS: http://www.utexas.edu/its/
Student Emergency Services: http://deanofstudents.utexas.edu/emergency/

BeVocal
BeVocal is a university-wide initiative to promote the idea that individual Longhorns have the power to prevent high-risk behavior and harm. At UT Austin all Longhorns have the power to intervene and reduce harm. To learn more about BeVocal and how you can help to build a culture of care on campus, go to: wellnessnetwork.utexas.edu/BeVocal.

Important Safety Information:
If you have concerns about the safety or behavior of fellow students, TAs or Professors, call BCAL (the Behavior Concerns Advice Line): 512-232-5050. Your call can be anonymous. If something doesn't feel right – it probably isn't. Trust your instincts and share your concerns.

The following recommendations regarding emergency evacuation from the Office of Campus Safety and Security, 512-471-5767, http://www.utexas.edu/safety/

Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.

- Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.
- Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class.
- In the event of an evacuation, follow the instruction of faculty or class instructors. Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or   Fire Prevention Services office.

- Link to information regarding emergency evacuation routes and emergency procedures can be found at: www.utexas.edu/emergency   1. 2.   3.

Title IX Reporting
Title IX is a federal law that protects against sex and gender based discrimination, sexual harassment, sexual assault, sexual misconduct, dating/domestic violence and stalking at federally funded educational institutions. UT Austin is committed to fostering a learning and working environment free from discrimination in all its forms. When sexual misconduct occurs in our community, the university can:

1. Intervene to prevent harmful behavior from continuing or escalating.
2. Provide support and remedies to students and employees who have experienced harm or have become involved in a Title IX investigation.
3. Investigate and discipline violations of the university's relevant policies.

Faculty members and certain staff members are considered "Responsible Employees" or "Mandatory Reporters," which means that they are required to report violations of Title IX to the Title IX Coordinator. **I am a Responsible Employee and must report any Title IX related incidents** that are disclosed in writing, discussion, or one-on-one. Before talking with me, or with any faculty or staff member about a Title IX related incident, be sure to ask whether they are a responsible employee. If you want to speak with someone for support or remedies without making an official report to the university, email advocate@austin.utexas.edu For more information about reporting options and resources, visit titleix.utexas.edu or contact the Title IX Office at titleix@austin.utexas.edu.

The following recommendations regarding emergency evacuation from the Office of Campus Safety and Security, 512- 471-5767, http://www.utexas.edu/safety/

4.3 University Policies

Academic Integrity

Each student in the course is expected to abide by the University of Texas Honor Code: "As a student of The University of Texas at Austin, I shall abide by the core values of the University and uphold academic integrity." **Plagiarism is taken very seriously at UT.** Therefore, if you use words or ideas that are not your own (or that you have used in previous class), you must cite your sources. Otherwise you will be guilty of plagiarism and subject to academic disciplinary action, including failure of the course. You are responsible for understanding UT's Academic Honesty and theUniversity Honor Code which can be found at the following web address: http://deanofstudents.utexas.edu/sjs/acint_student.php

Q Drop Policy

If you want to drop a class after the 12th class day, you'll need to execute a Q drop before the Q-drop deadline, which typically occurs near the middle of the semester. Under Texas law, you are only allowed six Q drops while you are in college at any public Texas institution. For more information, see: http://www.utexas.edu/ugs/csacc/academic/adddrop/qdrop