OVERVIEW -----

Course CSCI 6363-90L

Instructor Dr. Megan Strait (<u>aDr. Strait</u>)

Meetings Thursdays (18:30-21:00 U.S. Central Time) via Zoom

Communication

Medium

Slack (utrgv-csci-6363.slack.com)

Required Resources • time (~6-10 hrs/week)

• a computing device

• a Slack account

Grading

Grades are determined by computing the total points earned (out of 100) and applying the standard UTRGV point-to-letter function (e.g., $\geq 90 \rightarrow$ A). Points are available via the following activities:

- Participation (50 pts): Active participation in class discussions between Week 1 and Week 10 will be graded based on quality of the contribution (5 pts/week).
- **Projects** (35 pts): Students will apply their understanding of HCI via the development of a project proposal, graded in four parts: conceptualization (10 pts), a mid-development report (5 pts), a final design doc (10 pts), and final report (10 pts).
- **Posts** (15 pts): In five weeks of the semester, a reflective post (3 pts) is required so as to solidify students' understanding of the materials and facilitate contributions to the Thursday discussion.

COURSE: CSCI 6363

DOCUMENT: SYLLABUS

LAST UPDATED: AUGUST 26, 2020

DETAILED COURSE INFORMATION ------

Course

Human-Computer Interaction (CSCI 6363)

This course serves to broaden students' understanding of what constitutes a computational system, as well as the psychosociological nature of computer science and computer engineering. To that end, you will practice digesting and discussing primary literature and popular media that: speak to the breadth and reach of computing technologies (Module 1); call attention to the power and privilege encoded in technological systems (Module 2); and cover the fundamentals of human-centered design (Module 3). A fourth module (Module 4) will provide students the opportunity to apply their understanding via conceptualization, documentation, and presentation of a project proposal.

Modality

OSYNC (online-synchronous)

This section of CSCI 6363 will be delivered **fully online**. There are designated meeting times for synchronous instructor-student interaction (Thursdays from 18:30 to 21:30 US Central Time), which will be conducted remotely via <u>Zoom</u>. This will be supplemented by the digital presentation of course content and electronic instructor-student communications (via <u>Blackboard</u>, <u>Slack</u>, and <u>Zoom</u>).

Learning Objectives

Upon completion of this course, the learner will be able to:

- Recognize computing technologies of forms, functions, and application beyond that of the standard graphical user interface.
- Identify context- and user-based considerations relevant to the design, development, and deployment of computational systems that contribute positively to society.
- Anticipate, reflect on, and take responsibility for the social impacts of computing technologies.

Prerequisites

Must have earned a grade of C or better in CSCI 6302.

Required & Recommended Resources

- time (≥5 hrs/week is required, but ~10 hrs/week is recommended)
- a computing device (e.g., laptop, tablet, smartphone) with internet connectivity sufficient for:
 - downloading and uploading PDFs (~50 KB to ~10 MB)
 - downloading or streaming audio (~5-60 minutes in length)
 - downloading or streaming video (~5-15 minutes in length)
 - checking Slack (at least once per day)
- a device (phone or computer) with service sufficient for:
 - connecting to Zoom meetings
 - o contributing input via synchronous chat or audio

CSCI 6363 COURSE: DOCUMENT: SYLLABUS

LAST UPDATED: AUGUST 26, 2020

- a <u>Slack</u> account
- no textbook is required, but the following supplemental resources are recommended:
 - Algorithms of Oppression: How Search Engines Reinforce Racism
 - Artificial Unintelligence: How Computers Misunderstand the World
 - o Big Hero 6
 - <u>Invisible Women: Data Bias in a World Designed for Men</u>
 - Minority Report
 - Race After Technology: Abolitionist Tools for the New Jim Code
 - o WALL-E
 - Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy
 - White Fragility: Why It's So Hard for White People to Talk About Racism
 - Woke Gaming: Digital Challenges to Oppression and Social <u>Injustice</u>

Contribution Rubric

Grades are determined by computing the total points earned (out of 100) and applying the standard UTRGV point-to-letter function (e.g., \geq 90 \rightarrow A). 65 points are available via participation (5 pts/week) and posting (3 pts/post) activities. In these activities, students are expected to practice critical thinking and make substantive contributions to the class discussion. Substantive contributions require preparedness (careful coverage of and deep reflection on all materials prior to the class meetings), critical thinking (before and during the class discussion), and responsiveness to the contributions of others (both prior and ongoing) and, as such, will be graded as follows:

LEVEL	DESCRIPTION	3-PT SCALE	5-PT SCALE
none	No contribution was made or contribution lacked evidence of effort to understand the materials.	0	0
some	Contribution reflected effort to understand the materials but lacked evidence of deeper engagement.	2.25	3.75
done	Contribution reflected effort to reflect, analyze, and draw connections across the materials.	2.55	4.25
fun	Contribution reflected effort to reflect, analyze, and draw connections across the materials	3	5

and prompted further discussion/engagement.

Capstone

This course involves a collaborative final project requiring students to apply skills and fundamental knowledge gained throughout the semester. Students will work in teams of 3 to 5 to develop a **proposal** aligned with one of the three core facets of HCI: design, engineering, or research.

- **Design** teams will be expected to develop a high-fidelity prototype of a user interface and evaluations will be oriented toward aesthetics, organization of information, and usability.
- **Engineering** teams will be expected to develop a high-fidelity prototype of software or a low-to-mid-fidelity prototype of a physical system. Evaluations will correspondingly be oriented toward functionality, interactivity, and user experience.
- Research teams will be expected to develop a proposed investigation covering extant topical literature and proposed methods (design, measures, execution) and analysis. Evaluations will be oriented toward articulation of the motivation and methodological soundness.

All proposals will be graded in four parts: conceptualization (10 pts), a mid-development report (5 pts), a final design doc (10 pts), and final report (10 pts).

SEMESTER SCHEDULE ------

The UTRGV <u>academic calendar</u> can be found at https://my.utrgv.edu/home at the bottom of the screen, prior to login. Some important dates for Fall 2020 include:

• AUG 24: first day of classes

• AUG 27: last day to add a class

• NOV 11: last day to drop a class or withdraw

• NOV 26: university holiday (no classes)

• DEC 02: last day of classes

A tentative schedule of CSCI 6363 topics are as follows:

UNIT	WEEK	DATES	TOPIC	DELIVERABLE	DUE	PROGRESS
	0	AUG 24 - AUG 27	getting started	P001	AUG 25	3%
	1	AUG 31 - SEP 03	pervasiveness with Dr. Beiyu Lin	P002	SEP 01	6%
				PA01	SEP 03	11%
SCOPE	2	2 SEP 07 - SEP 10	potential with Dr. Natasha Altema-McNeely	P003	SEP 08	14%
				PA02	SEP 10	19%
	3	SEP 14 - SEP 17	power	PA03	SEP 17	24%
	4	SEP 21 - SEP 24	accessibility, privacy, social impacts, & societal costs			47%
UX	5	SEP 28 - OCT 01		al impacts, & PAO4-PAO7,	SEP 24	
UX	6	OCT 05 - OCT 08			OCT 15	
	7	OCT 12 - OCT 15				
	8	OCT 19 - OCT 22	interfaces	PA08	OCT 22	52%
DESIGN	9	OCT 26 - OCT 29	information	PA09	OCT 29	57%
DESIGN	1.0	10 NOV 02 - NOV 05 inclusivity with Dr. Heerin Lee	inclusivity	P005	NOV 03	60%
	10		PA10	NOV 05	65%	
	11	NOV 09 - NOV 12	proposal	PR01	NOV 12	75%
	12	NOV 16 - NOV 19	development report	PR02	NOV 19	85%
PROJECTS	13	NOV 23 - NOV 26	break	-	-	-
	14	NOV 30 - DEC 03	design doc	PR03	DEC 03	90%
	15	DEC 07 - DEC 10	final report	PR04	DEC 10	100%

MATERIALS & RESOURCES ------

W00 (AUG 24 - AUG 27): GETTING STARTED

• Listen to: Why Remote Learning Failed

- Read:
 - Why is video conferencing so exhausting?
 - A Posthumanist Critique Of Flexible Online Learning And Its "Anytime Anyplace"
 Claims

W01 (AUG 31 - SEP 03): PERVASIVENESS

- Listen to: The Future Is "Smart" and Dumb
- Read:
 - o Why TIME's 2019 Tech Optimists Are Upbeat About Silicon Valley's Future
 - Synthetic Sensors: Towards General-Purpose Sensing
 - o <u>Using Continuous Sensor Data To Formalize A Model of In-Home Activity Patterns</u>
 - <u>Displayed Uncertainty Improves Driving Experience and Behavior</u>

W02 (SEP 07 - SEP 10): **POTENTIAL**

- Listen to:
 - o 99%'s Interview with Caroline Criado Perez on "Invisible Women"
 - What if Facebook Used Data for Black Lives?
- Read:
 - o Coordinating Clinical Teams: Using Robots to Empower Nurses to Stop the Line
 - o Beyond the Prototype: Maintenance, Collective Responsibility, and Public IoT
 - o <u>Turkopticon: Interrupting Worker Invisibility in Amazon Mechanical Turk</u>

W03 (SEP 14 - SEP 17): POWER

- Listen to:
 - Google's Real Biases
 - o The Ellen Pao Effect
- Read:
 - Object to be a superior of the contract of
 - o Microsoft's Disastrous Tay Experiment Shows The Hidden Dangers Of AI
 - o <u>Microsoft's Politically Correct Chatbot Is Even Worse Than Its Racist One</u>

o <u>Discriminating Systems: Gender, Race, and Power in AI</u>

W04 (SEP 21 - SEP 24): UNINTENDED CONSEQUENCES

- Read:
 - Amazon Echo is Magical. It's Also Turning My Kid Into An Asshole.
 - o We Tested Bots Like Siri And Alexa To See Who Would Stand Up To Sexual Harassment
 - Language-Capable Robots May Inadvertently Weaken Human Moral Norms
 - Effects of Anonymity, Invisibility, And Lack Of Eye-Contact On Toxic Online
 Disinhibition
 - Auditing Radicalization Pathways On YouTube

W05 (SEP 28 - OCT 01): PRIVACY

- Listen to: <u>Your Doorbell Is Watching</u>
- Read:
 - o Just Because You're Working From Home Doesn't Mean Your Boss Isn't Watching You
 - Signal Appropriation Of Explicit HIV Status Disclosure Fields In Sex-Social Apps Used By Gay And Bisexual Men
 - Enhancing Lifelogging Privacy by Detecting Screens

W06 (OCT 05 - OCT 08): PREDATION, MISINFORMATION, & INTIMIDATION

- Listen to:
 - o <u>Blocking A Million Bad Men</u>
 - o <u>The Failed Promise Of The Gig Economy</u>
- Read:
 - o <u>Dark Patterns In UX</u>
 - o <u>Dark Patterns At Scale</u>
 - The Spreading Of Misinformation Online
 - Measuring #GamerGate: A Tale Of Hate, Sexism, And Bullying

W07 (OCT 12 - OCT 15): TBD

W08 (OCT 19 - OCT 22): **INTERFACES**

W09 (OCT 26 - OCT 29): **INFORMATION**

W10 (NOV 02 - NOV 05): INCLUSIVITY

• Read:

- o A Feminist HCI Approach To Designing Postpartum Technologies
- o Reframing Assistive Robots To Promote Successful Aging
- Robots For Joy, Robots For Sorrow: Community Based Robot Design For Dementia Caregivers

WEEK 11 (NOV 09 - NOV 12): PROPOSALS

• Watch: <u>Snoozle - A Robotic Pillow That Helps You Go to Sleep</u>

• Read:

- o A Peripheral Robotic Object To Shape Conversational Dynamics And Team Performance
- A Robotic Tortoise For Children Robot Interaction
- Using Robots to Moderate Team Conflict
- Hoaxy: A Platform For Tracking Online Misinformation
- Leveraging Bodily Signals And False Feedback To Regulate Our Emotions

CSCI 6363 COURSE: DOCUMENT: SYLLABUS

LAST UPDATED: AUGUST 26, 2020

INSTRUCTOR INFORMATION -----

Instructor Dr. Megan Strait

Slack Handle @DrStrait

Email megan.strait@utrgv.edu

Office virtual (not available in-person for Fall 2020)

Availability by appointment (Tuesday-Thursday: 12:00-14:00 U.S. Central Time)

Course Role &

As the instructor of this course, I am responsible for delivering the Responsibilities relevant content in a manner that is as digestible as possible. My corresponding activities include: making the overall course design, developing all materials, and executing the course (including running class meetings, managing grades, and answering questions).

> Please note that this course comprises only 25% of my role (10 hrs/week) as faculty at UTRGV. While many faculty at UTRGV are full-time instructors, my role additionally requires attention to and progress in research (12 hrs/week paid) and administrative activities (8 hrs/week paid). On average, however, research and administrative activities regularly demand 40+ hrs/week. Consequently, additional requests for time towards this course necessarily take time away from my other responsibilities or basic needs (e.g., sleep). Thus, please be mindful about additional requests for and use of course resources.

Teaching Philosophy In every course, I strive to cultivate an accessible and active learning environment that enables students to experiment with and explore course material in low-stakes settings, because becoming a great computer scientist or engineer requires that one understand its psychosociological nature. To that end, the learning activities and assessments are designed to provide free and multiple opportunities for independent practice, community reflection, and demonstration of one's understanding.

Teaching Experience & Qualifications After completing a dual Ph.D. in Computer Science and Psychology at Tufts University, I joined the UTRGV Department of Computer Science in Fall 2016. Since then, I have taught 16 courses spanning all levels of computer science instruction from introductory, pre-major courses (e.g., CSCI 1101) to advanced, multidisciplinary topics (e.g., CSCI 6363). In addition to iteratively improving on CSCI 6363 (this semester will be my fourth time teaching the course), I actively contribute to research on HCI and my contributions to date are highly lauded, with more than 10 international-level recognitions from top publication venues and top institutions (e.g., CMU, Cornell, Stanford).

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COURSE EXPECTATIONS & POLICIES -----

Accommodations

Please do not hesitate to request additional flexibility for completing work for this class. I do not require explanation, evidence, or discussion - I know that life can be challenging and that challenges (forseen and unforeseen) need attention and time.

Do, however, keep in mind that there is finite flexibility and a critical component of this course is the observation of multiple perspectives. For students without any background in HCI, there are approximately 130 hours of core materials that one must satisfactorily cover by the end of the semester (December 10). Moreover, although there is flexibility within the semester, passing CSCI 6363 requires that one take sufficient part of the class discussions. Thus, depending on how much availability one ends up with during the semester, it may or may not be possible to complete the course this fall.

Conduct

You are responsible for the energy that you bring into this course. Because your words and behavior have the ability to reach every student, faculty, and staff member associated with CSCI 6363, it is both expected and critical that you act with optimism, respect, and sincerity in regards to this course and all involved.

You are also responsible to participate in the capacity of a student. In particular, your enrollment in this course is voluntary and thus it is expected that, throughout your enrollment in this course, you respect the course as it is designed, the instructor's management of the course, and the right of your peers to engage with and learn the materials.

Conduct that is disruptive of either the instructor's management or your peers' learning (for example: dominating a discussion; expressing oneself in an argumentative, aggressive, dismissive, hateful, punitive, and/or sarcastic fashion) will be met with a written communication, documenting the misconduct and explaining expectations for moving forward. Repeat infractions will be documented to the Chair of the Department of Computer Science (Dr. Emmett Tomai) and/or referred to the UTRGV Office of Student Rights and Responsibilities.

Connectivity

Given the current infrastructure across the Rio Grande Valley, I recognize that internet access may be limited. Regardless of one's access, internet service can be unreliable depending on many factors out of any one person's control. Nevertheless, students will need

internet service sufficient for submitting deliverables and either phone or internet service sufficient to take part in the class' Zoom meetings.

Extra Credit

There will be three opportunities to earn "extra credit" (i.e., independent of the core CSCI 6363 materials). The opportunities are intended to facilitate broader engagement in computing and computing-related activities, as well as provide additional opportunity to make up for core points missed.

Participation

Class meetings will be held virtually (via Zoom), in real-time, on Thursdays (18:30-21:30) except where noted. Attendance of, active attention to, and interactive participation during these meetings is expected. Students are welcome to contribute via any of the following input options: the Zoom chat window, audio, and/or video.

Video input is not required, though it is very much welcomed. Apart from ensuring all background paraphernalia is respectful, those that do choose to have their camera on need not worry about demands or interruptions in one's personal environment (e.g., children, pets, etc. are all welcome) but should one need to take a break, please take care to ensure you have sufficient privacy (e.g., do not stream video during restroom visits).

COURSE: CSCI 6363

DOCUMENT: SYLLABUS

LAST UPDATED: AUGUST 26, 2020

UNIVERSITY RESOURCES & POLICIES -----

Blackboard Support

If you need assistance with course technology at any time, please contact the <u>Center for Online Learning and Teaching Technology</u> (COLTT).

Campus:	Brownsville	Edinburg
Location:	Casa Bella (BCASA) 613	Education Complex (EEDUC) 2.202
Phone:	956-882-6792	956-665-5327

Toll Free: 1-866-654-4555

Office Hours: Monday - Friday, 7:30 a.m. - 6:00 p.m.

Support Tickets Submit a Support Case via our Ask COLTT Portal

24/7 Blackboard Support

Need Blackboard assistance after hours? You can call our main office numbers, 956-882-6792 or 956-665-5327, to speak with a support representative.

ATTENDANCE:

Students are expected to attend all scheduled classes and may be dropped from the course for excessive absences. UTRGV's attendance policy excuses students from attending class if they are participating in officially sponsored university activities, such as athletics; have been provided such an accommodation by Student Accessibility Services (SAS); for observance of religious holy days; or for military service. Students should contact the instructor in advance of the excused absence and arrange to make up missed work or examinations.

Course sessions will be recorded for your later reference and may be helpful, depending on the type of activity, when you miss class for a legitimate reason.

The use of recordings will enable you to have access to class lectures, group discussions, etc. in the event you have to miss a synchronous or face to face class meeting due to illness or other extenuating circumstance. Our use of such technology is governed by the Federal Educational Rights and Privacy Act (FERPA), UTRGV's acceptable-use policy, and UTRGV HOP Policy STU 02-100 Student Conduct and Discipline. A recording of class sessions will be kept and stored by UTRGV, in accordance with FERPA and UTRGV policies. Your instructor will not share the recordings of your class activities outside of course participants, which include your fellow students, teaching assistants, or graduate assistants, and any guest faculty or community-based learning partners with whom we may engage during a class session. You may not share recordings outside of this course. Doing so may result in disciplinary action under UTRGV HOP Policy STU 02-100 Student Conduct and Discipline.

ACADEMIC INTEGRITY:

Members of the UTRGV community uphold the <u>Vaquero Honor Code</u>'s shared values of honesty, integrity and mutual respect in our interactions and relationships. In this regard, academic integrity is fundamental in our actions, as any act of dishonesty conflicts as much with academic achievement as with the values of honesty and integrity. Violations of academic integrity include, but are not limited to: cheating, plagiarism (including self-plagiarism), and collusion; submission for credit of any work or materials that are attributable in whole or in part to another person; taking an examination for another person; any act designed to give unfair advantage to a student; or the attempt to commit such acts (Board of Regents Rules and Regulations, STU 02-100, and UTRGV Academic Integrity Guidelines). All violations of Academic Integrity will be reported to Student Rights and Responsibilities through <u>Vaqueros Report It</u>.

STUDENTS WITH DISABILITIES:

Students with a documented disability (physical, psychological, learning, or other disability which affects academic performance) who would like to receive reasonable academic accommodations should contact Student Accessibility Services (SAS) for additional information. In order for accommodation requests to be considered for approval, the student must apply using the mySAS portal located at www.utrgv.edu/mySAS and is responsible for providing sufficient documentation of the disability to SAS. Students are required to participate in an interactive discussion, or an intake appointment, with SAS staff. Accommodations may be requested at any time but are not retroactive, meaning they are valid once approved by SAS. Please contact SAS early in the semester/module for guidance. Students who experience a broken bone, severe injury, or undergo surgery may also be eligible for temporary accommodations.

Pregnancy, Pregnancy-related, and Parenting Accommodations

Title IX of the Education Amendments of 1972 prohibits sex discrimination, which includes discrimination based on pregnancy, marital status, or parental status. Students seeking accommodations related to pregnancy, pregnancy-related condition, or parenting (reasonably immediate postpartum period) are encouraged to apply to Student Accessibility Services using the following link: Pregnancy Accommodations Request Formhttps://www.utrgv.edu/pregnancy

Student Accessibility Services:

Brownsville Campus: Student Accessibility Services is located in 1.107 in the Music and Learning Center building (BMSLC) and can be contacted by phone at (956) 882-7374 or via email at ability@utrgv.edu.

Edinburg Campus: Student Accessibility Services is located in 108 University Center (EUCTR) and can be contacted by phone at (956) 665-7005 or via email at ability@utrgv.edu.

MANDATORY COURSE EVALUATION PERIOD:

Students are required to complete an ONLINE evaluation of this course, accessed through your UTRGV account (http://my.utrgv.edu); you will be contacted through email with further instructions. Students who complete their evaluations will have priority access to their grades. Online evaluations will be available on or about:

Module 1 October 7-13, 2020

Module 2 December 2-8, 2020 Full Fall SemesterNovember 13 - December 2, 2020

SEXUAL MISCONDUCT and MANDATORY REPORTING:

In accordance with UT System regulations, your instructor is a "Responsible Employee" for reporting purposes under Title IX regulations and so must report to the Office of Institutional Equity & Diversity (OIED@utrgv.edu) any instance, occurring during a student's time in college, of sexual misconduct, which includes sexual assault, stalking, dating violence, domestic violence, and sexual harassment, about which she/he becomes aware during this course through writing, discussion, or personal disclosure. More information can be found at www.utrgv.edu/equity, including confidential resources available on campus. The faculty and staff of UTRGV actively strive to provide a learning, working, and living environment that promotes personal integrity, civility, and mutual respect that is free from sexual misconduct, discrimination, and all forms of violence. If students, faculty, or staff would like confidential assistance, or have questions, they can contact OVAVP (Office for Victim Advocacy & Violence Prevention) at (956) 665-8287, (956) 882-8282, or OVAVP@utrgv.edu.

COURSE DROPS:

According to UTRGV policy, students may drop any class without penalty earning a grade of DR (drop) until the official drop date. Following that date, students must be assigned a letter grade and can no longer drop the class. Students considering dropping the class should be aware of the "3-peat rule" and the "6-drop" rule so they can recognize how dropped classes may affect their academic success. The 6-drop rule refers to Texas law that dictates that undergraduate students may not drop more than six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six-course drop limit. The 3-peat rule refers to additional fees charged to students who take the same class for the third time.

STUDENT SERVICES:

Students who demonstrate financial need have a variety of options when it comes to paying for college costs, such as scholarships, grants, loans and work-study. Students should visit the Student Services Center (U Central) for additional information. U Central is located in BMAIN 1.100 (Brownsville) or ESSBL 1.145 (Edinburg) or can be reached by email (ucentral@utrgv.edu) or telephone: (888) 882-4026. In addition to financial aid, U Central can assist students with registration and admissions.

Students seeking academic help in their studies can use university resources in addition to an instructor's office hours. University Resources include the Advising Center, Career Center, Counseling Center, Learning Center, and Writing Center. The centers provide services such as tutoring, writing help, counseling services, critical thinking, study skills, degree planning, and student employment. In addition, services such as the Food Pantry are also provided. Locations are listed below.

Center Name	Brownsville Campus	Edinburg Campus
Advising Center	BMAIN 1.400	ESWKH 101A
<u>AcademicAdvising@utrgv.edu</u>	(956) 665-7120	(956) 665-7120
Career Center	BINAB 1.105	ESSBL 2.101
<pre>CareerCenter@utrgv.edu</pre>	(956) 882-5627	(956) 665-2243
Counseling Center	BSTUN 2.10	EUCTR 109
Counseling@utrgv.edu	(956) 882-3897	(956) 665-2574

Counseling and Related		
Services List		
Food Pantry	BCAVL 101 & 102	EUCTR 114
FoodPantry@utrgv.edu	(956) 882-7126	(956) 665-3663
Learning Center	BMSLC 2.118	ELCTR 100
<u>LearningCenter@utrgv.edu</u>	(956) 882-8208	(956) 665-2585
Writing Center	BUBLB 3.206	ESTAC 3.119
WC@utrgv.edu	(956) 882-7065	(956) 665-2538