

LMC 6310

Computer as Expressive Medium

The Computer Expressive - 89637 - LMC 6310 - DM

The Computer Expressive - 88905 - LMC 6310 - DM1

Instructor: Noura Howell, nhowell8@gatech.edu

TA: Rishivanth Thulasiraman, rthulasiraman3@gatech.edu

Mondays and Wednesdays, 9:30am - 10:20 am, Skiles 346 and/or MS Teams

Fridays, 12:30 - 3:15 pm, Skiles 346

Office hours: By appointment

Outline

How can computers be used as an expressive medium? This course invites students to engage computing and digital media technology for creative, artistic, expressive purposes. The focus is on using technology *in service of* compelling creative expressions. This requires working to develop basic computational literacy, creative idea generation, and a critical perspective on digital practices.

Skills developed in this class

Computational Literacy

Don't let anyone, including yourself, intimidate you about coding. It just takes practice and support, like anything else. We will provide the support, and expect you to put in the practice. In this class, we'll focus on [p5js](#).

Creative Idea Generation

Having creative ideas isn't always magical inspiration, it's often more like a muscle or a skill that you practice, train, maintain, grow. In this class, you will be on a strict training regimen to generate creative ideas every week.

Critical Perspective:

... But what does it all mean?? We will critically discuss the potential meanings and politics of many different example works that engage the computer as an expressive medium. Toward the latter half of the class, we will hone in on one approach for the final projects - called fabulation.

Weekly rhythm of the class sessions

Wednesdays: Discussion

To learn about the expressive potential of computing, we will explore many examples of projects that use the computer as an expressive medium. This will be a seminar style discussion of selected examples. Every student will pick a day to be a lead discussant.

Fridays: Creative Coding Lab

These labs will require students to develop basic programming skills in p5js, and apply these coding skills toward making creative "sketches". The TA will lead the lab sessions.

Mondays: Demo Day

Every student will demo their lab assignment every week. Get inspired by your peers and learn from their examples. Support each other. Lab assignments will be graded on the basis of both technical skills (e.g., technical capabilities employed, elegant code) and creativity (e.g., concept, aesthetics, surprising use of medium).

Logistics

Materials Needed

Students must have access to a computer capable of running p5js in a web browser. If this poses a financial burden, please fill out the form [here](#) to request to borrow a laptop from OIT and email support@lmc.gatech.edu to ask if there are any computers that can be borrowed. Please let the instructor know and we will work with you to make sure you are able to participate in the class.

No purchases. All readings online.

Main Assignments

Creative Coding Sketches

Weekly labs will develop creative coding skills in p5js. These will be created online in p5js and saved to the student's individual free online p5js account. Turning in the labs requires demoing the lab in class on the due date as well as submitting documentation on Canvas on the due date before the start of class.

Project on Fabulating Alternative Futures

The final project for the course will explore fabulation as a method for imagining alternative ways of living with technology, computation, and digital media. It is a group project, and students can choose their own groups. The final project has a few assignments: Project Team Formation, Project Proposal Presentation, Project Exhibition Demo, Project Exhibition Presentation, Project Report.

Lead Discussant

Each student will sign up for a day to be a lead discussant. A few students will sign up for the same day and work together to lead the discussion on that class day. Your group will work together to suggest additional reading(s), present on readings to the class, prepare questions relevant to the readings and artifacts, etc.

Topic of Interest Presentation

Each student will give a presentation on a topic of interest to them, whether a hobby, their research interest, pictures of their cat, etc. The only rules are nothing illegal and nothing harmful. Creativity can come from community and from everyday life, and this assignment seeks to bring both of those elements to the classroom.

Policies and Resources

Participation and Attendance

Class attendance and participation is mandatory*.

Participation throughout the semester is part of the final grade for this class. Students are expected to participate in discussions and in giving and receiving feedback on their work with their peers. Students should try to foster a supportive, inclusive, welcoming space for all their peers to participate in - this might mean talking a little more or talking a little less than your default.

Participation in class discussion is imperative because it allows you to explore the concepts collaboratively, and in the process, discover meanings and issues that you probably would not discover on your own. Participation in class also challenges you to continuously question, refine, and articulate your own ideas and interpretations.

There will be ways to participate on a smaller scale through smaller groups too. Part of participation is also helping make the class a supportive community for your peers to share their tentative thoughts.

*This semester it is particularly important that you never come to class in person if you have any flu-like symptoms. Please send me an email to let me know you will be out, and notify your teammates as necessary. But all absences will be excused, and arrangements will be made for virtual attendance if requested.

Information for Students with Disabilities

Students with disabilities at Georgia Institute of Technology will find programs designated to coordinate academic accommodations and promote access to all phases of university life. Such programming is coordinated through the ADAPTS-Disability Services.

The ADAPTS-Disability Services Program is a functional part of the Office of the Dean of Students. ADAPTS-Disability Services Program personnel oversee and coordinate programs to ensure accessibility to students with disabilities on an individual basis. The Georgia Institute of Technology strives to provide equal access to a college education as well as support to students with disabilities in their experience in the university community.

More information is available at: <http://disabilityservices.gatech.edu/>

Statement on Inclusion and Diversity⁹

The Ivan Allen College of Liberal Arts supports the Georgia Institute of Technology's commitment to creating a campus free of discrimination on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity, or veteran status. We further affirm the importance of cultivating an intellectual climate that allows us to better understand the similarities and differences of those who constitute the Georgia Tech community, as well as the necessity of working against inequalities that may also manifest here as they do in broader society.

What to do if you fall behind or are stressed

Your health is more important than this class. Please do not hesitate to reach out. If something major happens in your life that might make it hard to keep up with the class work, please communicate so we can make a plan to support you.

If you encounter more pressing difficulties, anxieties, or mental health challenges, you can also turn to the support we have in place at the Institute. This includes the Counseling Center (<https://counseling.gatech.edu/>), CARE (<https://care.gatech.edu/>), and other student life resources (<https://studentlife.gatech.edu/>).

Writing and speaking support at the Communication Center

Alumni consistently emphasize the value of presentation skills for success in digital media careers. Everyone is encouraged to maximize their writing and speaking skills so that you can best convey your great thoughts and ideas. The Communication Center (<https://www.commlab.gatech.edu/home>) offers student support for communication skills. You have great thoughts and ideas, and communication skills can help you effectively share them with others.

Sharing of work

Participation in the course implies permission for sharing work with others in the class and with future students if your work is judged to be a good example. If you are not comfortable with this, please let me know. Unless I am informed by you in writing (email) that you do not want your work shared with others in the context of current and future versions of this course, I will assume that it is available.

Honor Code Statement

Students are expected to adhere to the Georgia Tech Honor Code (<https://policylibrary.gatech.edu/student-life/academic-honor-code>).

Have you heard the saying, "Good artists borrow, great artists steal?"

Don't steal anyone's work.

Do get inspiration from other people's work, and adapt it in your own way to make it your own by adding some of yourself to it.

Do cite your sources. You can cite your classmate's sketch from last week. You can cite some example code you found online. You can cite our wonderful TA who helped you figure something out. You can say you got help from a classmate. But be clear about what parts you took from someone else, and what parts you changed or added. Scholars are always building on others' work and **citing** others' work.

In this class, you are required to give credit to others by citing their work.

Grading Breakdown

A#	Assignment Name	Points
1	Topic of Interest Presentation	5
2	Discussant	5
3	Interactive Pen Sketch	5
4	Poetry Sketch	5
5	Moving Images Sketch	5
6	Keyboard Input Sketch	5
7	Camera Capture Sketch	5
8	Data Display Sketch	5
9	Sound Reactive Sketch	5
10	Project Team Formation	2
11	Project Proposal Presentation	10
12	Project Exhibition Demo	20
13	Project Exhibition Presentation	8
14	Project Report	10
	Participation in class activities and discussion, especially pair or small group activities, overall teamwork, and giving feedback on other students' work and other teams' work.	10
	<i>totals:</i>	105

Any assignment turned in late will received at most half points. This is because most assignments are used for in-class activities, so the pedagogical value of the assignment is greatly lessened if it is not shared in class on the intended day.

The lowest grade will be dropped and not counted toward the final grade. In this case, all other assignments will count proportionally more. Participation cannot be "dropped".

Schedule

Note, changes to the schedule may occur. Stay tuned for announcements. Readings for each class day and assignment details will be finalized and released as we go along.

	Date	Topic	Read / watch before class	Deadlines
1	Mon Aug 22	Course overview, intro, logistics		
	Wed Aug 24	Discuss	p5js 2021 Showcase How to Survive a Critique - Giving and Receiving Feedback Allegra - TEXERE see tapestries here more description more description Benjamin - The Work of Art in the Age of Mechanical Reproduction	
	Fri Aug 26	Interactive Pen sketch		
2	Mon Aug 29	Demo		(A3) p5js Interactive Pen sketch due at start of class
	Wed Aug 31	Discuss	DJ Spooky Quantopia Ting - Within these Walls - Dreams of Flight Schechner - Performance Studies - Ch2	

	Fri Sep 2	Mondrian fan art		
3	Mon Sep 5	(no class) Labor Day Holiday		
	Wed Sep 7	Discuss	Niemeyer - Metered Tide - Coastal Futures Nicula - dioramas.space Puig de la Bellacasa - Matters of Care - Introduction	
	Fri Sep 9	Poetry sketch		
4	Mon Sep 12	Demo		(A4) p5js poetry sketch due at start of class
	Wed Sep 14	Discuss	Kazmi - Cranes and Cube Allahyari - She Who Sees the Unknown more TBD	
	Fri Sep 16	Moving image sketch		
5	Mon Sep 19	Demo		(A5) p5js moving images sketch due at start of class
	Wed Sep 21	Discuss	Lerchin - Aggregate Vision http://aggregate.vision/ https://benlerchin.com/ Heisters, Chen, Christian - Gestures https://vimeo.com/showcase/6988423 https://heistersgenerative.com/#	

			more TBD	
	Fri Sep 23	Keyboard input sketch		
6	Mon Sep 26	Demo		(A6) keyboard input sketch due at start of class
	Wed Sep 28	Discuss	Berdugo - Internet Aerobics Santos - Domain Errors more TBD	
	Fri Sep 30	Video / camera capture sketch		
7	Mon Oct 3	Demo		(A7) video / camera capture sketch due at start of class
	Wed Oct 5	Discuss	Saraf - Alaap more TBD	
	Fri Oct 7	Data display sketch		
8	Mon Oct 10	Demo		(A8) data display sketch due at start of class
	Wed Oct 12	Introduce design futuring	TBD	
	Fri Oct 14	Sound reactive sketch		
9	Mon Oct 17	(no class) Fall break		
	Wed Oct 19	Tactics for design futuring	Kozubaev et al. - Expanding Modes of Reflection in Design Futuring Wong et al. - Infrastructural Speculations: Tactics for Designing and Interrogating Lifeworlds	
	Fri Oct 21	coding catch up / questions		
10	Mon Oct 24	Demo		(A9) sound reactive sketch due at start of class
	Wed Oct 26	What is fabulation for design futuring? Introduce final projects on fabulations	Helms et al. - Scaling Bodily Fluids for Utopian Fabulations Tsaknaki et al. - Fabulating Biodata Design Futures for	

			Living and Knowing Together	
	Fri Oct 28	Team "speed networking" activity TBD		
11	Mon Oct 31	Fabulation Workshop Part I		
	Wed Nov 2	Fabulation Workshop Part II		
	Fri Nov 4	Work on projects		(A10) Final project team formation due Fri Nov 4 at 11:59pm
12	Mon Nov 7	Team brainstorm		
	Wed Nov 9	Team brainstorm		
	Fri Nov 11	Work on projects / coding		
13	Mon Nov 14	Final project proposals		(A11) Final project proposal presentation due at start of class
	Wed Nov 16	Final project proposals		(A11) Final project proposal presentation due at start of class
	Fri Nov 18	Work on projects / coding		
14	Mon Nov 21	Work on final projects		
	Wed Nov 23	(no class) Day before Thanksgiving		
	Fri Nov 25	(no class) Day after Thanksgiving		
15	Mon Nov 28	Work on final projects		
	Wed Nov 30	Work on final projects		
	Fri Dec 2	Work on projects / coding		
16	Mon Dec 5	Final project exhibition		(A12) Final project demo due at start of class (A13) Final project presentation due at start of class