

LCC 6650 eTV Project Studio

Tuesdays Thursdays 4:30-5:45
TSRB 322 (PenLab) and TSRB 113 (Game Lab)

Prof. Janet Murray

TSRB 320A

Office hours Monday 4-6

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Lab Manager

Ricky Yu

General Course Description

This course explores the design possibilities at the intersection of complex storytelling and emerging platforms of digital media including eTV, simulation games, and virtual/augmented reality. Students investigate the design space by analyzing existing artifacts, running surveys, and doing user testing, as part of the process of designing one or more semester-long group prototypes that will be demo-able by the end of the semester and documented in slide presentations, posters, a final video, and often in conference presentations or journal papers. Prototypes may run on existing technologies or they may involve experimental software and/or hardware environments of our own creation.

The fundamental question this Project Studio addresses is how interaction design for emerging computational technologies can allow us to create, experience, and share more complex forms of storytelling.

Spring 2023 Pickrick Project

This semester's course will focus on a location-based AR application that recreates Civil Rights activism of 1964-5 at a site that is now on the Georgia Tech campus. The project is described here: <https://dilac.iac.gatech.edu/node/99> [Links to an external site.](#) It raises key design questions of the portrayal of actual events and we will look at other examples of AR and VR historical recreations and documentaries, as well as questions of how to structure navigation and direct attention through multiple time steps and within a superimposed virtual environment. There is an experienced team in place which students in the class will be joining, with the aim of testing and publicly demonstrating a functioning complete application by the end of the semester.

Meetings Tuesdays 12:30-3:15 in the DILAC Lab Skiles 318

Office hours after class or by appointment

There is an associated TEAMS group here (students will be added as members by 2nd week of the semester): <https://teams.microsoft.com/l/team/19%3aMHJePQL3AzU7NBvNm65OYIgqaXbeZfb>

1Y5T4DIruNh81%40thread.tacv2/conversations?groupId=8a379e17-692b-4a7d-88a7-37bf1e9b6ebb&tenantId=482198bb-ae7b-4b25-8b7a-6d7f32faa083

Learning Outcomes

M.S. TOP LEVEL

Demonstrate the ability to devise, design, create, and assess prototypical digital media artifacts, services, or environments and to contextualize them within recognized traditions of practice.

M. S. SECONDARY LEVEL

Knowledge

- Formally identify digital media design elements, such as interface conventions, processing strategies, and information structures.

Comprehension

- Ability to explain, give examples of, and defend one's use of formal digital media design terminology

Application

- Demonstrate use of digital media to create prototypes
- Demonstrate good time management skills
- Demonstrate ability to set realistic goals

Analysis

- Can develop interactive media artifacts

Synthesis

- Can design and create digital artifacts that create the experience of agency for the interactor.
- Can design and create digital artifacts that segment and tag media to create meaningful organizational units.
- Can communicate, coordinate, and work productively as a team member.

Evaluation of Works

- Can justify the design choices in their works
- Can formulate and test design hypotheses

PHD Learning Objectives

all the items in the MS Learning Objectives above PLUS

PhD TOP LEVEL

- Students can identify and analyze a domain within the field digital media and identify areas for original contribution as well as methods to pursue these contributions.
- Students can formulate original interpretations and design original prototypes that reflect an understanding of the humanistic context of digital media.

PhD SECONDARY LEVEL

Knowledge

- Identify the historical and cultural roots of digital media

Synthesis

- Demonstrate ability to conduct original research in support of designing new genres and forms of digital media
- Demonstrate ability to conduct original research in support of assessing and / or critiquing new genres and forms of digital media

General Policies

Students are expected to indicate the source and authorship of any work not original to them.

Students are expected to come to class prepared and actively respond to presentations by the instructor and fellow students. Students are encouraged to bring their laptops to class, and are always welcome to look up information related to the discussion during class.

All students will have access to the PenLab in TSRB 322 and Game Lab in TSRB 113 and are expected to abide by the rules of that lab, including never propping open doors or leaving the room empty and unlocked.

There is no place in this course for discrimination or harassment on any basis, including but not limited to race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity, or veteran status. Georgia Tech is committed to providing its staff, faculty, and students the opportunity to pursue excellence in their academic and professional endeavors. This opportunity can exist only when each member of our community is assured an atmosphere of mutual respect. Georgia Tech's full anti-harassment policy is online here: <http://www.policylibrary.gatech.edu/anti-harassment-policy>

Students in need of Learning Accommodations: Any student who feels that they may need an accommodation for any sort of disability, please speak to me after class or come see me in my office hours so we can discuss alternative strategies. Georgia Tech support services are available through the Office of Disability Services of the Dean of Students Office, as described here: <http://disabilityservices.gatech.edu>.

Attendance Policy Students are expected to attend every class meeting and to participate actively in the design discussion. Students are expected to fulfill the development schedule as developed by the team, and to make their work available in a timely manner that supports the overall team effort

PenLab Group Projects

Videos here: <http://etv.gatech.edu/projects/> (use left-hand filters and start with most recent)

Of special note:

<http://etv.gatech.edu/2017/05/05/ares-room-scale-vr-narrative/> Ares (VR)

<http://etv.gatech.edu/2017/12/11/alien-encounter-vr/> Trespass (VR)

<http://etv.gatech.edu/2016/05/16/harry-pottar-2/> Harry PottAR (AR)

Current Prototype of Pickrick Project (Live Demo, Videos in Teams Files)

<https://dilac.iac.gatech.edu/node/99>

AR

“3D Freedom Fighters” App <http://3dfreedomfighters.com/>

Historic Sites: <https://arpost.co/2018/03/14/augmented-reality-glasses-bring-u-s-historic-sites-life/>

Haunted Planet. Bram Stoker’s Vampires

<https://www.youtube.com/watch?v=CGcr9SnSa0s> (Hauntedplanet.com)

VR

The Guardian 6x9 A Virtual Experience of Solitary Confinement

<https://www.filmlinc.org/films/6x9/> Oculus:
<https://www.oculus.com/experiences/go/1073856559366835/>

Derek A Ham, I AM A MAN https://www.youtube.com/watch?v=Ko9lgz20_LQ

Nonni de la Peña,

Out of Exile: Daniel’s Story <https://www.youtube.com/watch?v=TiSKz2Wa9w8>

Across the Line: <https://emblematicgroup.com/experiences/across-the-line/>

Empathetic Media “Ferguson Firsthand” and other projects

<https://www.empatheticmedia.com/virtual-reality/#work>

Readings

Brenda Laurel

“What is Virtual Reality” <https://medium.com/@blaurel/what-is-virtual-reality-77b876d829ba>

Janet Murray “Not a Film and Not an Empathy Machine” <https://immerse.news/not-a-film-and-not-an-empathy-machine->

Janet Murray <https://www.technologyreview.com/2018/03/22/401111/how-close-are-we-to-the-holodeck/>

Yuchen Zhao,¹ Brandy J. Pettijohn,² Amanda Y. Wang, Daniel P. Keehn, Angela Dai, Joy Dang, Janet H. Murray “Exploring Location-based AR Narrative Design for an Historic Site”

Jennifer Challenor, Minhua Ma “[A Review of Augmented Reality Applications for History Education and Heritage Visualisation](#)” *Multimodal Technologies and Interaction* 2019
<https://www.mdpi.com/2414-4088/3/2/39/pdf>

See also Historical Resources in Teams and in Files on Canvas

Videos

“Thresholds of Reality: Creating Coherent Enchantment in VR (NYU 2017)” [Thresholds of Reality: Creating Coherent Enchantment in AR | Janet Murray | AR in ACTION NYC \(Links to an external site.\)](#)
[Links to an external site.](#)

Who's Afraid of the Holodeck? <https://www.youtube.com/channel/UCJPPEt6e10-mmkOreS1oCiw>

(other references will be added based on semester-specific issues)

Grading

Students will be given specific project tasks and responsibilities, such as coding, visual design, project management, and will report weekly on progress. Students will formally assess themselves and one another on their contribution to collaborative projects.

Project Development 60% for contribution to collective project..

Individual Contributions to class design process includes individual assignments, creative ideas, technical contributions to the group, constructive participation in class including response to other classmates' and other teams' presentations 40%

Required IRB Training: <http://researchintegrity.gatech.edu/irb-required-training> Follow links to complete CITI training for Social and Behavioral Research with Human Subjects. Must be completed by the end of Week 4. This is a pre-req of doing the user testing which you must all participate in.

Schedule

Details of assignments will be on the Project Studio Canvas site under Discussions and all assignments and project documentation should be handed in there by linking to longer files. You can upload files or host them elsewhere, but if you host on google docs please make sure your permissions are set to public..

Project Studio: PenLab /DILAC Spring 2023
Preliminary Schedule

Week #	Date	
1.	1/10	Overview and Demo
2.	1/17	Goals for this semester
3.	1/24	Team Formation
4.	1/31	Development Schedules Due
5.	2/7	Design & Development
6.	2/14	Design & Development
7.	2/21	Design & Development
8.	2/28	Design & Development
9.	3/7	First Prototype – alpha test
10.	3/14	First prototype - User Testing Mid-term Team evaluations due
Spring Break		
11.	3/28	Iterative Design
12.	4/4	Second Prototype Alpha
13.	4/11	Second Prototype User Testing
14.	4/17	Final Revision
15.	4/25	Final prototype
Finals week	5/2	Web page with video of demo run posted; running code, final poster, final team evaluations