

ARCH 4001. SENSE: Spatial Experiences for Narrative and Sensory Emotions

7270

Fall 2025

Ming Tang.

Professor, SAID, DAAP, University of Cincinnati

Director of XR-Lab.

Office hours: MWF 12:30pm-1:20pm

In Teams DAAP, UC.

1. [Tutorial Library \(DDCM\)](#)
2. [UC Canvas](#)

Lecture or demo: **Red**=important. **green**= understand

Week 1: 08.25. project: Landscape of Knowledge

class	Topic	What to do
M	Activity • Who is who • Syllabus Meet in room 6231	Read: • UC AI policy • paper on AI, XR, Metaverse, Digital Twins • Cyber-Physical Experiences: Architecture as Interface • AI in Architecture
W	Meet in room 6231, Lecture: Generative AI	Assignment: P1-A, B. Research + Concept Watch: Stable Diffusion Gen-AI Practice: SD

F	Meet 4425 Mixed Reality; AI video. Video #6 at Generative AI	Experiment AI image to video
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Week 2: 09.01 Project: Case studies

class	Topic	What to do
M	No class (holiday)	
W	Review P1-A. CGC Meet 4425 Demo: Rhino's remesh and retopology	Due: P1-A Read: 3D Model Generation: Rodin , Meshy , Tripo , Trellis3d ; hunyuan , 3daistudio , Video Creation: Sora , OpenArt , Runway , Krea Flux , Kling , Hynyan , Genesis
F	CGC meet at 2pm Demo: subD Working time AI	Watch: remesh and retopology (new for AI) Rhino subD modeling Control net, video #4 in Generative AI Read: Museum of Emotions competition

Week 3: 09. 08. Program + circulation + model

class	Topic	What to do
M	Working time AI	Watch: - Nano Banana video. New video #7 added to Generative AI 360 image from Hunyuan

W	Pin-up on the whiteboard. CGC Form Groups. (2-3 people per group)	Due: P1-B. Research + Concept Assign P2. Site + Program
F	Working time Import a test model into Playcanvas, then into Viverse	Watch: Playcanvas to Viverse

Week 4: 09/15 Circulation and program

class	Topic	What to do
M	Desk critic	Watch: Infraworks
W	Example world Viverse: temple. Desk critic. Work on a 3D model in PlayCanvas as a Team	Watch: • Playcanvas to Viverse • parametric design, free-form modeling • Rhino Modeling • Grasshopper
F	CGC: 3:30 PM Read: creating a connection between Playcanvas and Viverse. Demo: VIZ and Metaverse Team set up, Playcanvas Collision mesh	Watch: • Viverse Hackathon launched • Join Discord • Playcanvas to Viverse • Other playcanvas tutorial

Week 5: 09/22. Spatial experience

class	Topic	What to do
M	P2 Review. CGC	Due: P2. Site + Program Assign P3. Spatial Experience + Interactive VIZ

W	Demo: Video texture: temple GS model Desk critique in the studio, Work time on Playcanvas + Viverse	Read: Placemaking in the AI Era Watch: Video texture in Playcanvas to Viverse
F.	Desk critique in the studio, Work time on Playcanvas + Viverse	

Week 6. 09.29. Visualization: Metaverse. (10.1-15)

class	Topic	What to do
M	VR demo Desk critic in the studio	Watch: #5, Normal map in Playcanvas to Viverse
W	Desk critic in the studio	Watch: • #6, 7 Materials in Playcanvas to Viverse • Rhino optimization • Rhino UV mapping Resources: Getting started, how to make a world: https://www.youtube.com/watch?v=w3MFHo4v69E <u>VIVERSE Tutorials playlists:</u> • Playlist 1: https://www.youtube.com/playlist?list=PL52sjC8dlQZ9QWG7f1atQM56eMSnnZMN5 • Playlist 2: https://www.youtube.com/watch?v=5Ae0gd26dPc&list=PLGVnmfrayaVY5x-kM6VZOjvnBLbsfnJKA

		<u>VIVERSE Discord channel:</u> https://discord.gg/viversecreators
F	Desk critic in the studio	<u>Watch:</u> • Rhino optimization • Rhino UV mapping

Week 7: 10/06. VIZ through metaverse

class	Topic	What to do
M	Desk critic in the studio	
W	Desk critic in the studio	
F	Reading day	

Week 8: 10.13. VIZ through the metaverse

class	Topic	What to do
M	Desk critic in the studio	
W	Review P3	Due: P3. Spatial Experience + Interactive VIZ
F	Comprehensive building design	Assign: P4. Midterm

Week 9: 10.20: Comprehensive building design

class	Topic	What to do
M	2 pm.. CGC. Guest lecture: Caroline Anderson	Watch
W	Desk critic	
F	Desk critic	

Week 10: 10.28. Comprehensive building design

class	Topic	What to do
M	Desk critic	
W	Desk critic	
F	Desk critic	

Week 11: 11.03 Comprehensive building design

class	Topic	What to do
M	Desk critic	
W	Desk critic	
F	Review P6	Due: P4. Midterm Assign: P5. Final

Week 12: 11.10. Validation through VR

class	Topic	What to do
M	Group 1, 2 visit DF	Visit Digital Future Building to see the VR/AR center, XR-Lab.

		Address: Digital Future Building 3044 Reading Road, Cincinnati, OH 45206 For UC students, you can take the free UC shuttle bus route "Innovation District" to the DF building. Visitors can also park at the UC DF garage, or 1819 parking lot, \$7/hour, or free street parking.
W		
F	Group 3,4 visit DF	

Week 13: 11.17. Validation

class	Topic	What to do
M	Room 7270 Workshop on AI, lighting, and visualization: Isabel Potworowski, Negar Goljia, Hank Hildebrandt	
W	Group 2, 3 visit DF	
F	Group 4, 5 visit DF	

Week 14: 11. 24. Validation

class	Topic	What to do
M	Working time in the studio	
W	Working time	

F	Holiday (Thanksgiving)	
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Week 15: 12.01 Final presentation

class	Topic	What to do
M	Rehearse presentation.	
W.	Working time	
Friday (12.05)	Final presentation 1-5	Due: P5. Final

Week 16: 12.09 (Exam Week)

class	Topic	What to do
M.		
W		
F.		