

Spring 2025

CS 59200-RXR Research Topics in Extended Reality

A seminar course where recent virtual, mixed, and augmented reality research papers are presented and discussed.

Instructor

Voicu Popescu

popescu@purdue.edu

<https://www.cs.purdue.edu/xrlab/>

Topics

1. Locomotion, navigation, redirection
2. Localization, tracking, and motion capture
3. Graphics and displays
4. Embodiment, avatars, and presence
5. Haptics
6. Multisensory and multimodal interfaces
7. 360 video
8. Diminished reality
9. Collaboration
10. 3D authoring
11. Perception and cognition
12. Cybersickness mitigation
13. Applications: simulation and training
14. Applications: education
15. Applications: healthcare
16. Applications: social and cultural

Grading

1. Attendance 20%
2. Paper presentations 50%
3. Participation 30%