

Assignment 3 – 3DUI Survey Paper
CAP6121
Due: 3/20/2026 11:59pm

In this assignment, you will write a paper surveying a particular topic in 3D user interfaces. The goal of the assignment is for you to learn about current research in the 3D UI field and to begin to prepare for your final project. You should use this assignment to research the area you are thinking about working in for your final project. You can also use this assignment to help choose a paper to present in the course.

Instructions

For this paper, you are to choose a particular topic in 3DUIs and write a survey paper on one of them. However, the key to this paper is that it must focus on current research, from 2020 to the present. Thus, you will have to scan the literature to find the appropriate material. Your survey should NOT be a rehashing on what is covered in the 3DUI book. You can consider this paper a follow on to the material presented in the book.

Some potential topics include:

- Input Devices
- Visual Displays
- Haptic Devices
- Navigation
- Selection and Manipulation Techniques
- System Control
- Augmented Reality
- Mixed Reality

To get you started the following conferences and journals are a good place to start:

- IEEE Virtual Reality
- IEEE Symposium on 3D User Interfaces
- IEEE Haptics Symposium
- ACM User Interface Software and Technology
- ACM Virtual Reality Software and Technology
- Eurographics Virtual Environments
- Presence
- Journal of Virtual Reality
- Journal of Human-Computer Studies
- ACM Conference on Computer Human Interaction

The length of the paper should be as long as it needs to be (probably around 10 to 12 pages). You will be graded on clarity of exposition and on thoroughness of your survey.