

Our project seeks to utilize the latest technology to enhance recordings of lectures. Specifically, we record videos with a 360-degree view of lectures and deliver them in formats that are compatible with virtual reality consumption.

Most of us are very familiar with videotaping lecture and sharing them online with students. The traditional way of videotaping lecture is quite inconvenient. The biggest problem is cameras having limited field-of-view, so they can only record a tiny part of the classroom at a time. In order to capture the teacher, either someone has to man the camera, or the teacher has to stand still throughout the whole lecture. Both are very limiting.

Recently a new category of cameras have emerged, with the ability of a very wide field of view. For example, the Kodak SP360 camera we use can record a whole hemisphere, so it provides a 360-degree video of the classroom. Now a teacher can set up the camera and leave it alone, knowing that it can capture everything in the room. Similar cameras are made by Samsung, LG and Ricoh.

Besides new cameras, online video platforms have also provided new features for delivering recordings with 360-degree views. Both Youtube and Facebook support 360-degree video. When paired with a virtual-reality headset, the video will pan around with the viewer's head movement, providing an experience similar to actually sitting in the lecture.

This year, we have recorded a whole course with this method. We have also recorded several distinguished lectures, which allows many more people to experience those events than the venues could possibly accommodate.