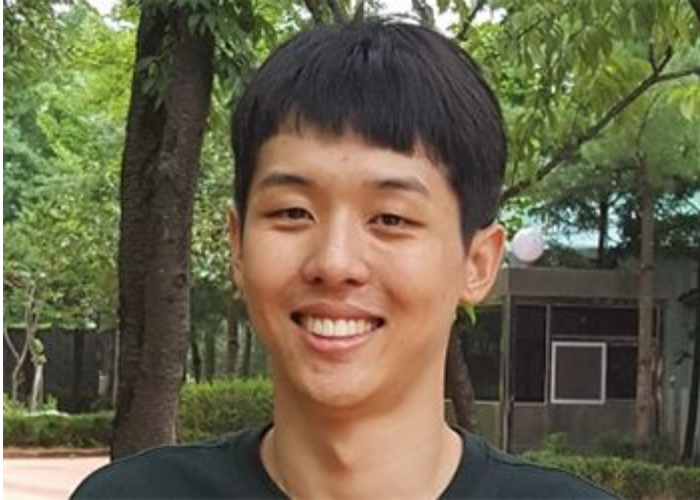


Introduction to Augmented Reality

COMM 115S

Teaching Team



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Instructor



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TA

Course Schedule

Week 1-2: Getting used to what augmented reality (AR) is.

Week 3-5: Learning from technical and psychological perspectives.

Week 6-8: Discussing interesting topics.

Course Format

Lectures & Slides: Before Class Hours (posted on Monday and Wednesday)

Discussion Sessions: During Class Hours (via Zoom for the first two weeks)

Demos: Recommended to Try Before Class Hours

Week 1

Week 1: What is Augmented Reality?

- The definition of AR.

Week 1.5: History and a Brief Forecast of AR

- A tour on previous work of the decades.

Week 2

Week 2: Overview of AR as a Technology

- AR is a technology and we will learn how it works.

Week 2.5: Artwork and Thoughts on Reality and Virtuality

- AR is an idea and we will learn what people thought of.

Week 3

Week 3: Human Sensory Systems and AR Headsets

- AR headsets is mainly visual and it assumes the human visual system.

Week 3.5: Communication and Media

- AR will be discussed as a medium.

Week 4

Week 4: Graphics and Vision for AR

- AR heavily relies on computer graphics and vision.

Week 4.5: Presence and the Media Equation

- There is the psychology of why AR works.

Week 5

Week 5: Rendering and Tracking of AR

- A deeper look at how graphics and vision are specifically applied for AR.

Week 5.5: Psychology of AR (and VR)

- Introduction of empirical psychology research done with AR (and VR).

Week 6

Week 6: Exam

- A step between week 3-5 and week 6-8.

Week 6.5: The Current Generation of AR

- How does AR technology looks like these days.

Week 7

Week 7: (Depth) Cameras and Calibration

- (Depth) cameras are very valuable for the implementation of AR.

Week 7.5: Telepresence Systems

- I personally consider telepresence to become the first killer app.

Week 8

Week 8: Design and HCI

- Application of the design and HCI frameworks to AR.

Week 8.5: Future directions of AR

- We will have time freely guessing the future of AR.