# CS 498 VR Midterm 1 Study Guide

# Feb 27<sup>th</sup> 2018 7-8:30PM

The Book talks about the contents we covered in lectures with more details. We suggest you to use slides as an outline and book chapters to deepen your understandings.

# Chapter 1

• Course overview, defining VR, historical perspective.

# Chapter 2

2.1

• Bird's-eye view: VR hardware.

2.2

• Bird's-eye view: VR software, Sensation and perception.

### Chapter 3

3.1, 3.2

• Bird's-eye view: Sensation and perception.

#### 3.2, 3.3

- Geometric modeling, linear transformations, 2D rigid-body transformations.
- 3D rotations, yaw, pitch, roll, quaternions, conversions.
- Local vs Global coordinate frames. Homogeneous transforms.

## 3.4, 3.5

• Homogeneous transforms.

#### Miscellaneous in Chapter 3

- Intro. viewing transforms; Eye, canonical view, and viewport transforms.
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