

# Multimedia Systems

2019

## 1 Introduction to Multimedia

### 1.1 Image Processing

#### 1.1.1 影像處理基本步驟 (Basic Steps)

## 2 Multimedia Representations and Processing

## 3 Introduction to Augmented Reality(AR) and Virtual Reality(VR)

## 4 RGBD Applications and Multimedia Program Design

## 5 Feature Matching and Content-Based Retrieval/Searching

## 6 Multiple View Geometry and Point Cloud(SfM/SLAM/PCL)

## 7 Fundamental Concepts in Image and Video Database

## 8 Sports Information Systems

## 9 Special Topics on Multimedia Research and Applications

## References

- [1] Daniel L. Baggio. *Mastering OpenCV with practical computer vision projects : step-by-step tutorials to solve common real-world computer vision problems*

*for desktop or mobile, from augmented reality and number plate recognition to face recognition and 3D head tracking.* Packt Pub., 2012.

- [2] Z.N. Li, M.S. Drew, and J. Liu. *Fundamentals of Multimedia*. Texts in Computer Science. Springer International Publishing, 2014.
- [3] Richard Szeliski. *Computer Vision: Algorithms and Applications*. Springer-Verlag, Berlin, Heidelberg, 1st edition, 2010.