CISC3011：Digital Image Processing

Syllabus:

- **In-depth coverage of digital image processing**
- **Topics include:**
  - Brief Introduction of Image Processing (weeks 1-2)
  - Point operations/Combining images/histograms (week 3)
  - Filters (weeks 4-5)
  - Edge and contours (week 6-7)
  - Corner detection (week 8)
  - Mid-Term (week 9)
  - Curve Detection and Morphological Filters (weeks 10-11)
  - Color image processing (week 12)
  - Introduction to Spectral Techniques (weeks 13-14)

Popular textbooks
- R. C. Gonzalez, R. E. Woods, Digital Image Processing, 4th edition, Pearson, 2018
- William K. Pratt, Introduction to Digital Image Processing, CRC Press, 2013.
- Digital Image Processing: An Algorithmic Introduction using Java by Wilhelm Burger and Mark J. Burge, Springer Verlag, 2008
- R. C. Gonzalez, R. E. Woods, S. L. Eddins, Digital Image Processing using Matlab, 2nd edition, Gatesmark Publishing, 2009.
- A. Kaehler, G. Bradski, Learning OpenCV 3, OReilly Media, 2017.

Lecture notes & reading materials

See link: https://drive.google.com/file/d/1wPFCpEvfOZX8pX-tlPhsAgIOKz1SGyGj/view?usp=sharing