

NHẬP MÔN THỊ GIÁC MÁY TÍNH

INTRODUCTION TO COMPUTER VISION

Introduction

- **Lecturer:**
 - **Name: Lê Thanh Hải**
 - **Department: Mechatronics at Room 210 B11.**
 - **Email: ltai@hcmut.edu.vn**
- **Grading Policies:**
 - **Class participant, class test and homework: 30%**
 - **Project: 40%**
 - **Final exam: 30%**

Contents

Chapter 1: Introduction to Computer Vision

Chapter 2: Light and Color Capture

Chapter 3: Binary Image Analysis

Chapter 4: Linear Filters

Chapter 5: Edge Detection and Seam Carving

Chapter 6: Fitting

Chapter 7: Projective Geometry and Camera Models

Chapter 8: Camera Calibration

References

1. ***Computer Vision: Algorithms and Applications***, by Richard Szeliski, Springer, 2010. (<http://szeliski.org/Book/>)
2. ***Computer Vision: A Modern Approach***, by D.A. Forsyth and J. Ponce, Prentice Hall, 2002.
3. ***Computer Vision***, by Linda G. Shapiro and George C. Stockman, Prentice Hall, 2001.
4. ***Digital Image Processing***, by Rafael Gonzalez and Richards Woods, Prentice Hall, 2007.
5. ***Fundamentals of Digital Image Processing***, by Anil K. Jain, Prentice Hall, 1989.
6. ***Multiple View Geometry in Computer Vision***, 2nd Edition, by R. Hartley, and A. Zisserman, Cambridge University Press, 2004.