ES453, "Introduction to Computer Vision"

1. **Course Description:** An introductory course covering both theory and application of image processing and pattern recognition techniques used for automation, medical imaging, and remote sensing.

2. **Course Objectives:**
   - To understand the fundamentals of computer vision tools and techniques:
     - a. Becoming proficient in a variety of image processing methods;
     - b. Developing skills for image understanding and pattern recognition;
     - c. Developing a working knowledge of current technical issues in the field of computer vision;

3. **Textbook.** Digital Image Processing Using MATLAB 2/e

4. **Software.** Assignments in this course will utilize functions from MATLAB’s Image Processing Toolbox, the Video and Image Processing Blockset, and the Image Acquisition Toolbox. This is available on all laboratory computers.