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강연제목: MATLAB 을 이용한 영상 처리 기초 / Image processing with MATLAB for beginners

Abstract:

MATLAB is very popular in engineering field for processing experimental data and images, as it is a high-level language with a simple and straightforward syntax. In addition, its interactive environment and easy visualization make it a useful tool for testing various image processing methods. This tutorial introduces the basic concepts of image processing with MATLAB for beginners. It covers image loading/saving, spatial filtering, thresholding, and color image processing. Examples are provided to help students try and learn the basics of image processing using MATLAB.

Brief Biosketch

Hongki Yoo is an associate professor in the Department of Mechanical Engineering, KAIST, Korea. Professor Yoo received his B.S., M.S., and Ph.D. in Mechanical Engineering from KAIST. He worked as a postdoctoral research fellow and instructor in Wellman Center for Photomedicine at Harvard Medical School and Massachusetts General Hospital. He led Biomedical Optics and Photomedicine Lab in the Department of Biomedical Engineering at Hanyang University, 2012-2019. In 2019, he joined KAIST to lead Biomedical Optics and Optical Metrology (BOOM) Lab. His research topics include multimodal optical imaging, endoscopic imaging, optical coherence tomography, confocal microscopy, diagnostics and therapeutics of cardiovascular disease, and machine learning in optical imaging. For more information on Professor Yoo's research projects, please visit his website at https://boom.kaist.ac.kr