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강연제목: 심혈관 영상에서의 인공지능/ Artificial Intelligence in Cardiovascular Imaging

Abstract:

Medical imaging modalities such as X-ray, CT, and MRI play a crucial role in cardiovascular diagnostics. This presentation will focus on the applications of artificial intelligence (AI) techniques, particularly deep learning, in X-ray and CT imaging.

Deep learning has demonstrated remarkable performance in image segmentation, making it a valuable tool for various cardiovascular applications. For instance, it can be used to segment the four chambers of the heart, quantify calcium deposits in the cardiovascular system, and automatically segment the aortic region for use in computer-aided decision support (CDSS). Additionally, deep learning can automatically delineate the boundaries of cardiovascular organs in chest X-ray images, enabling the quantification of disease progression.

These research advancements have led to the development of clinically relevant technologies that have been transferred to companies and are currently being used in various hospitals. The presentation will highlight specific examples of these technologies and their clinical impact.

Brief Biosketch

학력: 서울대학교 원자핵공학과 학사 (2003) 서울대학교 방사선응용생명과학 협동과정 박사 (2011)

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