"AI of medical imaging: Impacts on pipeline differences on patient-level, personalized outputs"

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Abstract

Computer-aided diagnosis (CAD) uses artificial intelligence and machine learning (AI/ML) methods to analyze medical images at scale and provide clinical decision-making support. Evaluating CAD across the AI/ML pipeline, including at the patient level, is essential for clinical translation. In this talk, I will discuss recent projects in advancing methods to evaluate computer output of likelihood of cancer at the patient level, for breast cancer using dynamic contrast-enhanced magnetic resonance imaging. I will also discuss our work in evaluating the impact to CAD of differences in reference standards for determining the molecular subtype of breast cancer. I will also discuss the need for data in AI development and the role of the Medical Imaging and Data Resource Center (midrc.org).