



Yin Li, PhD

Assistant Professor
Department of Biostatistics & Medical Informatics
University of Wisconsin-Madison

Friday, November 11, 2022

12:00-1:00 pm

HSLC 1229 *or* via Zoom Link

<https://uwmadison.zoom.us/j/99942468911>

Towards Medical Video Analytics

Abstract:

Video has become an increasingly common form of data recorded at clinics. Cameras are instrumented in operation rooms, at intensive care units (ICUs), around nursing homes, and during telehealth visits, resulting in a plethora of medical videos capturing various aspects of care delivery and the patients' responses to them. At present, these videos are recorded primarily for quality assurance, and its potential to medicine has yet to be explored. A main barrier lies in the extraction of clinically relevant signals from the high dimensional video data.

This talk will describe our effort on developing algorithms and tools for video analytics and its application to medical videos. I will introduce our work on developing computer vision models to detect individual events in videos and to model temporal relationships among these events. Further, I will present our preliminary results on using our models to analyze neonatal and adult ICU videos, with the goals of quantifying care delivery activities and monitoring high risk patients.



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