TEXAS TECH UNIVERSITY
Department *of* Computer Science

Augmented Intelligence for Clinical NLP: From Clinical Trial Optimization to Evidence Appraisal

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Zoom

Abstract: The integration of predictive analytics in healthcare, facilitated by advancements in Clinical Natural Language Processing (NLP), has shown tremendous potential. However, manual eligibility prescreening is still the standard practice due to the tremendous complexities in criteria text and the large gap between machines' output and users' need for foundational and context-dependent tasks. Augmented Intelligence can be strategically employed in clinical NLP, thereby enhancing predictive analytics in healthcare. Specially, in the life cycle of clinical trials, from study design to conduct, and to evidence comprehension and synthesis, there are many unmet user needs among clinical researchers, patients, and clinicians, causing suboptimal decisions and potentially compromised clinical trials. In this talk, I will present my research work that aims to provide Augmented Intelligence to these different stakeholders of clinical trials to augment their decision-making.

Bio: Dr. Yingcheng Sun is an Assistant Professor in the Department of Computer Science at UNC Greensboro. Before arriving at UNC Greensboro in 2022, he was a postdoctoral research scientist in the Department of Biomedical Informatics at Columbia University. He received his Ph.D. degree in Computer Science from Case Western Reserve University. His research interests include information retrieval, Natural Language Processing and applied machine learning with applications in clinical informatics to solve important healthcare problems.