

CSDS 500 and ECSE 500 Fall 2021 Colloquium

11:30AM to 12:30PM

Tuesday, November 16, 2021

Virtual

Zoom Webinar ID: 940 7438 8634

Passcode: 357363

“Develop data-driven AI technologies to enable translational biomedical research”

Abstract: In this talk, Dr. Xu will talk about developing artificial intelligence (AI) and other advanced computational techniques to enable data-driven translational biomedical research. Specifically, Dr. Xu will briefly talk about her research in (1) natural language processing (NLP) techniques to extract biomedical entities and their semantic relationships from over 30 million biomedical articles; (2) AI-based drug discovery; (3) computational approaches to understand genetic causes of diseases; (4) computational approaches to understand gut-microbiome-brain interactions; (5) deep learning approaches in image-based disease diagnosis; (6) patient-electronic health record (HER)-based patient outcomes research.



Rong Xu
Case Western Reserve University

Bio: Rong Xu is Professor of Biomedical Informatics, Founder and Director of the Center for AI in Drug Discovery at School of Medicine, Case Western Reserve University. Dr. Xu earned her BS degree in Biology from Peking University, M.S degree in Biology from Case Western Reserve University, M.S in Computer Science and Ph.D. in Biomedical Informatics both from Stanford University. Dr. Xu’s research falls into two broad categories: theoretical computer algorithm development and translational biomedical research. Her research interests in computer science focus on NLP, artificial intelligence, machine learning, data mining, statistical learning, systems biology, and other advanced computational techniques that can create, integrate, and analyze large amounts of heterogeneous and complex biological and health data. Her research interests in biomedical sciences include drug discovery, disease gene discovery, precision medicine, and outcomes research. Dr. Xu is the principal investigator on multiple federal grants of over \$20 million. She has received several prestigious awards: (1) elected Fellow of American College of Medical Informatics; (2) The NIH Director’s New Innovator Award, (3) the Landon-AACR (American Association for Cancer Research) Innovator Award for Cancer Prevention Research, (4) the AMIA (American Medical Informatics Association) New Investigator award, (5) Crain’s Cleveland Business latest “Who to Watch Health Care” and (6) CWRU COVID-19 Champion. Her research works have been featured in Nature News, NIH News, New Yorker Times, NPR, ABC news, NBC news, Forbes, USA Today, Fox News, among other national and local news channels.

This is to certify that _____ attended this seminar. Certified by _____.
Certificates of attendance and other evidence of CPD activity should be retained by the attendee for auditing purposes.



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