專 題 演 講

Speaker：Prof. Chun-Nan Hsu (UC San Diego health)

Talk Title：Decentralized Privacy-Preserving Healthcare Machine Learning using Blockchain

Abstract :

Cross-institutional healthcare predictive modeling can accelerate research and facilitate quality improvement initiatives, but most existing privacy-protecting methods are based on centralized architecture which presents security and robustness vulnerabilities. We describe a new framework, ModelChain, to adapt Blockchain technology for privacy-preserving machine learning, without revealing any patient health information. We also discuss the benefits and potential issues of applying Blockchain technology to increase interoperability between institutions.

Autobiography :

Dr. Chunnan Hsu is a researcher, educator, highly cited author and entrepreneur in Artificial Intelligence, Machine Learning, Data Mining, and their applications. He is currently developing revolutionary approaches leveraging the most advanced information technologies to realize the next generation health care at the Department of Medicine, UC San Diego, La Jolla, CA, USA. Prior to his current position that he was a faculty at Arizona State University (1996 --1998), Academia Sinica, Taipei, Taiwan (1998 -- 2014) and University of Southern California (2009 -- 2013).