Title: Blockchain as A Solution for Credible Data Management

Seungmo Kim, Ph.D.
Department of Electrical and Computer Engineering
Georgia Southern University
Statesboro, Georgia, USA
Email: seungmokim@georgiasouthern.edu | Tel: +1-540-235-1438, +82-10-4889-8297
Web: https://www.mokim.org/

Abstract
Data has become an integral part of our daily lives, permeating various fields such as artificial intelligence and big data. With the proliferation of data, the importance of reliable data storage has become increasingly evident. Incidents resulting from unreliable data storage practices are not uncommon, highlighting the need for robust solutions.

Distributed computing has long been recognized as a viable approach to achieving reliable data storage. Leveraging the power of lower-cost hardware, such as processors and memories, distributed computing has evolved to encompass a broader array of dissimilar computers. One remarkable example of this evolution is the blockchain technology, renowned for its implementation of a "distributed ledger."

Blockchain, owing to the distributed nature, presents itself as a method for storing data in a credible and trustworthy manner. This characteristic makes it a promising solution for ensuring reliable data storage across diverse users and stakeholders. In this talk, we delve into the concept of blockchain technology as a robust data management method that fosters trust among stakeholders. Furthermore, it also introduces real-world use cases where blockchain technology has played a pivotal role in promoting trust within data management practices. These use cases demonstrate the practical applications of blockchain across various industries and shed light on its potential to revolutionize data storage and management.

Bio
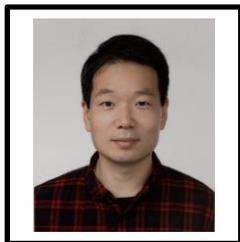
Dr. Seungmo Kim is an experienced scholar with a primary background in wireless communications and networking. He obtained his bachelor's and master's degrees in electrical engineering from KAIST in 2006 and 2008, respectively. He received his doctorate degree in electrical engineering from Virginia Tech, USA, in 2017. Since August 2017, Dr. Kim has held the position of assistant professor at Georgia Southern University where he has made significant scholarly contributions through his leadership of the New-Era Wireless (NEW) Lab. In particular, with a focus on blockchain and intelligent transportation systems, Dr. Kim has been instrumental in securing over $0.7 million in funding throughout his academic career. His scholarly endeavors have resulted in the publication of 30+ papers in prestigious venues across a wide range of topics and have garnered recognition within the academic community, which include wireless communications and networking, vehicular technology, education, etc.