DIRISA 2024 Annual National Research Data Workshop



Contribution ID: 12 Type: Talk

Securing Identity using Biometrics and Zero Knowledge Proofs

Thursday, 4 July 2024 11:05 (20 minutes)

Data protection and cybersecurity are distinct concepts, but they complement each other. Data protection ensures data integrity, while cybersecurity protects the digital ecosystem from threats like cyberattacks and malware. In an interconnected digital world, identity is increasingly stored, shared, and processed as data, including biometrics and Personal Identifiable Information. To address these challenges, a method using Zero Knowledge Proofs (ZKPs) is proposed to protect biometrics information and secure identities. ZKPs allow one party to prove a statement is true without revealing additional information, ensuring confidentiality and security without exposing the biometric information. This approach not only enhances biometric data security but also addresses privacy concerns associated with storing and transmitting sensitive information.

Primary authors: Mrs NTSHANGASE , Sthembile (Researcher); Ms MYAKA, Siphelele (Cybersecurity Re-

searcher)

Presenters: Mrs NTSHANGASE, Sthembile (Researcher); Ms MYAKA, Siphelele (Cybersecurity Researcher)

Session Classification: Session