UNIVERSITY of GUELPH

COLLEGE of ENGINEERING AND PHYSICAL SCIENCES

SCHOOL OF COMPUTER SCIENCE

Professional Seminars in Cybersecurity

Thursday, November 17th at 1pm
ONLINE Teams Meeting

Blockchain Security

Abstract: The terms "Blockchain" and "Distributed Ledger Technology" ("DLT") are often used interchangeably, but they are distinct innovations. DLT is a family of technologies that employs a shared database architecture to maintain multiple, identical copies of an auditable, up-to-date distributed or decentralized ledger of transactions or data. A Blockchain is a specific type of DLT and a method of organizing data in aggregated, ordered 'blocks' that are 'chained' together by a cryptographic hash function. While Blockchain technology has been promoted as a new innovation for 21st century commerce, smart contracts and democracy, all is not well in terms of security. This talk will discuss the characteristics of trustworthy DLTs, network security requirements, Smart Contracts and stupid Solidity code, mapping smart code to OWASP controls, and examples of Blockchain control failures (Bridge attacks, the Canadian QuadrigaCX Debacle).

Presented by: Walter Cooke
CISM, CISSP, CCSP, Sr. Enterprise Security Architect, The Co-operators

Bio: Walter is an information security professional with a Canadian security and intelligence background and over 40 years' experience leading and developing information security solutions. Walter specializes in cryptographic security and threat and risk assessments. Walter also has extensive experience in engineering large international Public Key Infrastructure (PKI) systems and has spoken at numerous international security conferences on technical and keynote topics. Walter maintains CISM, CISSP and CCSP professional information security designations.