Graduate Seminar

First Speaker:

Sudharaka Palamakumbura Memorial University

> Thursday, March 6 1:00 p.m., HH-3017

Enhancing cloud computing security using AES encryption

Abstract:

The Advanced Encryption Standard (AES) is an algorithm used to encrypt and decrypt data for the purposes of protecting the data when it is transmitted electronically. It has been approved as a standard of encryption by the National Institute of Standards and Technology and is used worldwide. In this presentation I will give a brief introduction to Cloud Computing and how AES can be used to secure data stored in cloud. We shall also look at the internal structure of the AES algorithm.

Second Speaker:

Muhan Yu Memorial University

Persistent homology and high-dimensional data analysis

Abstract:

High-dimensional data is produced in various fields and is hard to visualize. In this talk, we will describe a method of Gunnar Carlson to visualize high-dimensional point clouds using bar codes. The method is based on computing the homology of a collection of spaces parametrized by an integer variable, known as persistent homology.