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Discrete Mathematics Seminar

Time: Friday, April 19, 2019, 2:15-3:15 PM
Room: 330 Derrick Hall
Title: Compression and Decompression Engines and Compressed Domain
           Processors
Speaker: Dr. Dan Tamir, Department of Computer Science, Texas State University

Abstract:

IDensify is a data compression company founded by Dan Tamir and Dan Bruke. The first part of iDensify's IP was developed in Texas State University and was provisionally patented by TX State. Nevertheless, later, the IP was released by the University to Tamir and he has patented it under iDensify. The related patent is US20190028115A1. This patent was approved in less than three months review by the USPTO. The second part of iDensify's IP includes a provisional patent and a corresponding utility patent application for Compression and Decompression Engines. The utility patent application is currently under review by the USPTO. The third part of IDensify's IP concentrates on compressed domain processors (CDPs). CDPs are units that can perform certain operations on compressed data. This IP has been recently patented under USPTO patent US20190013823A1, entitled, "Compression and Decompression Engines and Compressed Domain Processors." This patent was approved in less than three months review by the USPTO. The theoretical and technical description of this patent would be the core subject of the math seminar. Tamir is currently working on the protection of IP related to memory management (quite confidential LoL).

In the Seminar, Tamir will talk about the theory and technology behind the CDP patent and will provide highlights from his experience with protecting iDensify's IP.

The following is the abstract of Patent US20190013823A1.

COMPRESSION AND DECOMPRESSION ENGINES AND COMPRESSED
DOMAIN PROCESSORS

Compressed domain processors [are] configured to perform operations on data[,] compressed in a format that preserves order. The Compressed domain processors may include operations such as addition, subtraction, multiplication, division, sorting, and searching. In some cases, compression engines for compressing the data into the desired formats are provided.