

The rising STAR of Texas

## **Discrete Mathematics Seminar**

\*\*\* Please note that this talk has been changed to 2:00-3:00 PM to accommodate the speaker's schedule. \*\*\*

Time:	Friday, March 1, 2019, 2:00-3:00 PM
Room:	330 Derrick Hall
Title:	Deep Learning: Science or Alchemy
Speaker:	Dr. Ziliang Zong, Department of Computer Science, Texas State University

Abstract:

Deep artificial neural network (a.k.a. deep learning) has undoubtedly become one of the most promising methods in solving many challenging problems in the field of computer vision, natural language processing, speech recognition, and so on. Although computer scientists have built many successful deep learning models for different applications, we do not really know how do the most advanced algorithms work. That is a big problem and pretty sad. If we cannot explain how deep learning works, how can we call it "science"? People may argue that in nature intelligence is only partially exposed to rational explanation and other parts are just instinctual. Is it the case for artificial intelligence as well? Or is it simply because we are too naive (e.g. lack of sufficient math knowledge) to understand it yet? As a computer scientist, I have many questions. In this talk, I would like to share them with mathematicians and seek for help.