

University of Wisconsin Oshkosh
Mathematics Department Colloquium

Wednesday, April 3, 2019, 4:10 – 5:00 pm

Swart 217

UW-Fox Valley Mathematics Associate Professor Alex Lavrentiev

The Basics of Neural Networks

Machine Learning algorithms are ubiquitous. We encounter them when we use an e-mail spam filter, apply for a loan, or get recommended videos on YouTube. This introduction to neural networks will explain what a basic feed-forward neural network is and go over the process of setting up and training such a network. To illustrate the process, we'll use an example of the basic image recognition problem of identifying handwritten digits. If time permits, the talk will include convolutional neural networks, a type of neural network usually used for image recognition. No prior knowledge of neural networks or machine learning is required to enjoy this talk.