

CSYE 7245

Big-Data Systems and Intelligence

Analytics

Exam Syllabus

The exam will be in one part.

1. An online HackerRank exam in our finals slot.

TOPICS:

Descriptive Statistics, Probability Theory, Probability Distributions

Inferential Statistics, Test Statistics, Hypothesis Testing

Correlation and Regression Regularization

Data Visualization

Resampling Methods

Cross-Validation

The Bootstrap

Ensemble methods

Bagging and Boosting

Algorithm Analysis

Data Structures

Big-O

Master Theorem

Apache Spark

Neural Networks

Recurrent neural network (RNN)

Convolutional Neural Networks

Autoencoders

Variational Autoencoders

Generative Adversarial Networks (GANs)

Deep Generative Models