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What do you want to learn?





Introduction to Trading, Machine Learning & GCP Google Cloud, New York Institute of Finance

#### Overview

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# Week 4

Introduction to Trading, Machine Learning & GCP

### Week 4

Discuss this week's modules here.

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## Introduction to Neural Networks and Deep Learning





In this module you'll learn about neural networks and how they relate to deep learning. You'll also learn how to gauge model generalization using regularization, and cross-validation. Also, you'll be introduced to Google Cloud Platform (GCP). Specifically, you'll be shown how to leverage GCP for implementing trading techniques.

∧ Less

## **Learning Objectives**

- Understand neural networks and how they're related to deep learning.
- Learn how to deal with overfitting using regularization, and using cross-validation to test models.
- Understand the benefits of using AI Platform Notebooks.
- Understand how Google Cloud Platform can be used for implementing trading strategies.

∧ Less

# Deep Learning

▶ Video: Short history of ML: Neural Networks 7 min

Resum

- ▶ Video: Short history of ML: Modern Neural Networks 8 min
- Discussion Prompt: Applying ML to Winter Ski Resort Problem 10 min
- Reading: Example BigQuery ML DNN code 10 min

### **Model Generalization**

- ▶ Video: Overfitting and Underfitting 6 min
- ▶ Video: Validation and Training Data Splits 4 min
- Practice Quiz: Model generalization 1 question

## **Course Recap**



