simplilearn | PURDUE UNIVERSITY

Deep Learning with Keras with TensorFlow

Course Introduction

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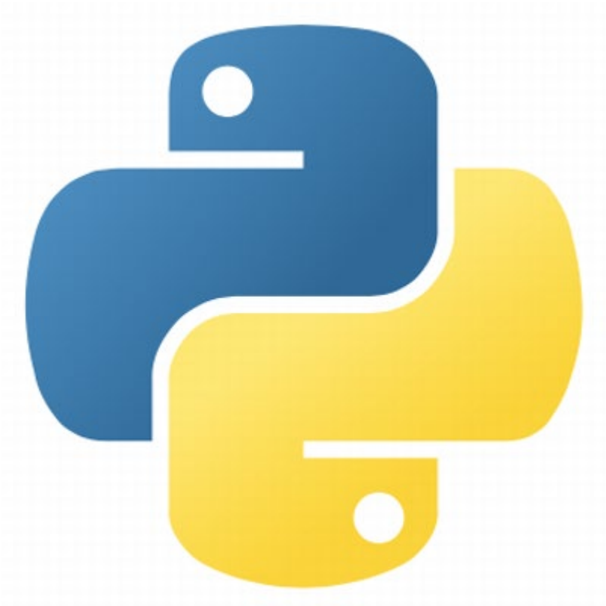
Course Objectives

By the end of this course, you will be able to:

- Solve complex problems using neural networks
- Configure deep learning algorithms and learn how to train deep networks
- Use various frameworks required for creating neural networks along with their functionalities
- Perform image classification using CNNs
- Work on sequential data with LSTMs

Course Prerequisites

The course requires prior knowledge of the following technologies:



Python

Machine Learning

Course Outline

1

Artificial Neural Networks: Understand the functioning of neural networks

2

AI and Deep Learning Introduction: Get exposed to usages of deep learning at a use case level

3

Deep Neural Network and Tools: Get exposed to different frameworks for building a deep neural model in Python

4

Deep Neural Net optimization, tuning, interpretability: Learn to optimize and tune your deep learning models for enhanced performance

Course Outline

5

Convolutional Neural Net: Understand the working of CNN and use it for image classification

6

Recurrent Neural Networks: Use RNNs to model sequential data

7

Autoencoders: Learn autoencoders to learn efficient data codings in an unsupervised manner

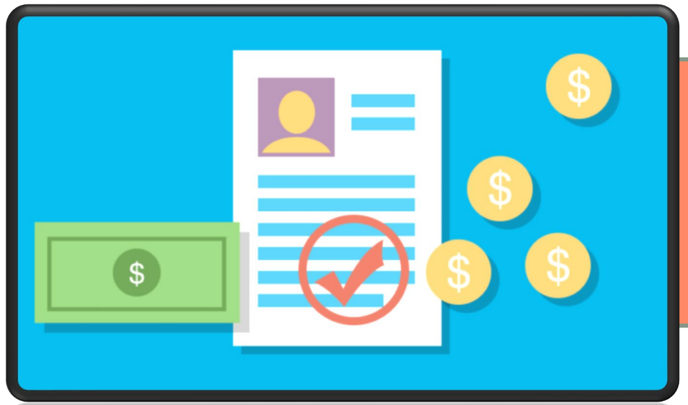
Skills Covered:

1. ANN, CNN, and RNN

2. Autoencoders

Project Highlights

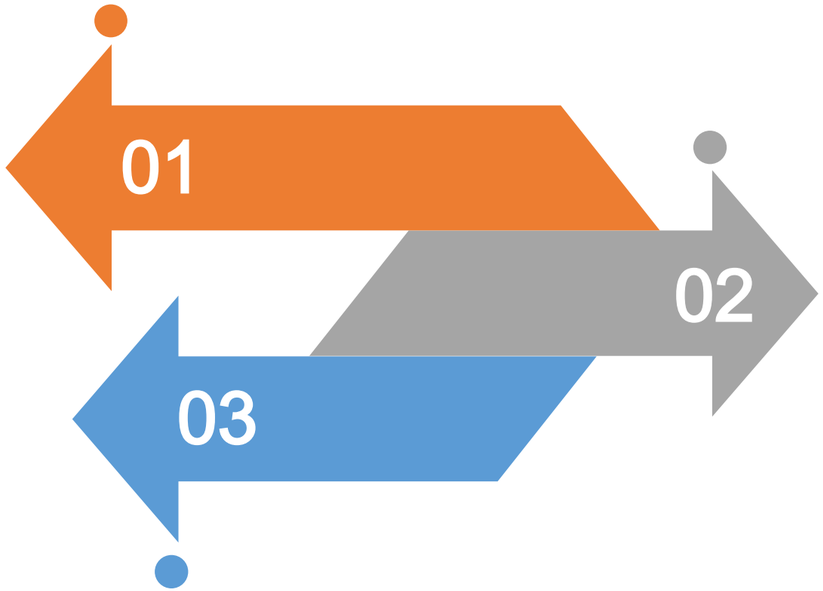
PUBG Players Finishing Placement Prediction (Practice Project)



Lending Club Loan Data Analysis

Course Completion Criteria

Attend all the Live Virtual Classes (LVC) in a batch



Score a minimum of 75% in course-end assessment

Submit at least one course-end project

DATA AND
ARTIFICIAL INTELLIGENCE

Thank You