

FUNDAMENTALS OF DEEP LEARNING FOR COMPUTER VISION

31/10/2019

Milan, Reply Building
Miniconference Room

Explore the fundamentals of Deep Learning by training neural networks and using results to improve performance and capabilities

In this course, you'll learn the basics of deep learning by training and deploying neural networks



WHAT YOU WILL LEARN

- Identify the ingredients required to start a Deep Learning project
- Train a deep neural network to correctly classify images it has never seen before
- Deploy deep neural networks into applications
- Identify techniques for improving the performance
- Assess the types of problems in deep learning
- Modify neural networks to change their behavior

PREREQUISITES

- ✓ Personal Laptop
- ✓ Familiarity with basic programming fundamentals such as functions and variables
- ✓ Familiarity with Python

AGENDA

08:45am – 09:00am: Registration

09:00am – 09:45am: Introduction to Deep Learning and Course Overview

09:45am – 10:00am: Break

10:00am – 12:00pm: Unlocking New Capabilities

Hands-on exercise: Training neural networks to perform image classification

12:00pm – 1:00pm: Lunch

1:00pm – 1:40pm: Unlocking New Capabilities

Hands-on exercise: Deployment of trained neural networks from their training environment into real-life applications

1:40pm – 3:15pm: Measuring and Improving Performance

Hands-on exercise: neural network performance optimization and applying DNNs to object detection

3:15pm – 3:30pm: Summary and Review of concepts and practical takeaways

3:30pm – 3:40pm: Break

3:40pm – 4:40pm: Assessment

Validate your learning by applying the deep learning application development workflow (load dataset, train and deploy model) to a new problem

Assessment Project: Train and Deploy a Deep Neural Network

4:40pm – 5:00pm: Next Steps

Learn how to set up your GPU-enabled environment to begin work on your own projects.

Workshop survey



DEEP
LEARNING
INSTITUTE

Certificate of Competency



The course is taught in Italian