

Implement Image Recognition with a Convolutional Neural Network

Exploring and Preparing a Dataset for Image Recognition



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Course Overview



**Dataset exploration
and preparation**



Training a CNN



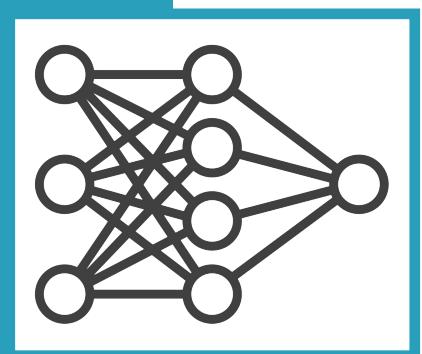
**Improving
performance of a CNN**



Course Prerequisites



Basic to intermediate level of Python



Foundational knowledge of convolutional neural networks



Module Overview



- What are we trying to solve?**
- Setting up your demo environment**
- Organizing your dataset**
- Exploring the dataset**
- Preprocessing and preparing the data**



What Are We Trying to Solve?

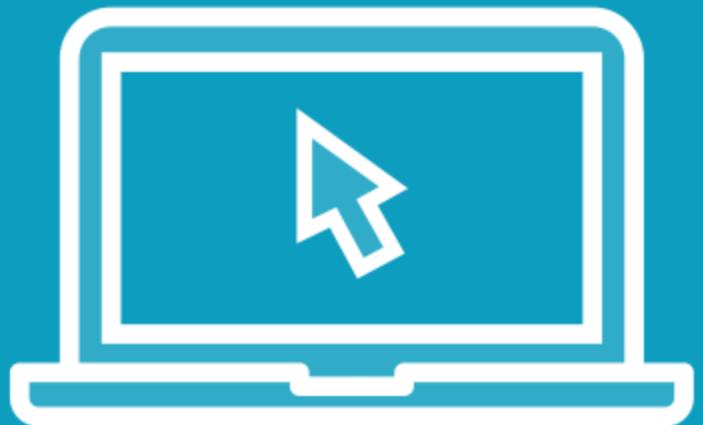








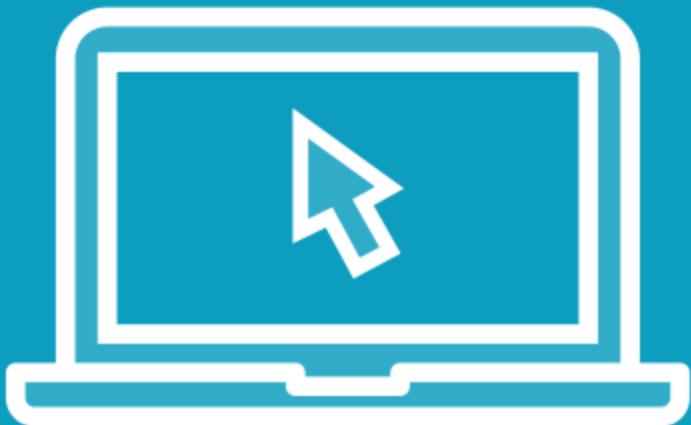
Demo



Setting up your environment



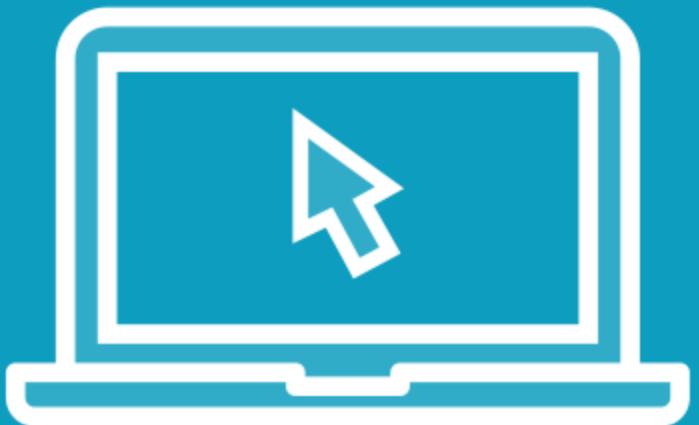
Demo



Organizing the dataset



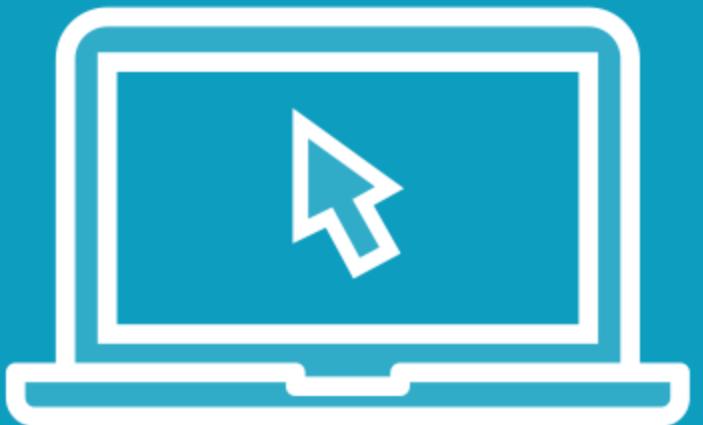
Demo



Exploring the dataset



Demo



Preprocessing and preparing the dataset



Summary



The problem – Predicting pneumonia with chest x-ray images using a CNN

Installed the packages required to address a deep learning problem

Downloaded and organized the dataset correctly for next steps

Explored and visualized the dataset

Preprocessed and prepared the dataset to be fed into a CNN



Up Next:
Training a Convolutional Neural Network to
Classify Images

