Language Identification

This is an audio classification project in which we will use Pytorch for audio processing and CNN for audio classification. We will use Indian language audio data from four classes, Hindi, Tamil, Telugu, and Kannada, and predict the language spoken in the audio.

Duration : 1 month Language : english Price : 15000

What you will learn?

- Real Time Projects
- Language Identification
- Audio preprocessing steps to build
- Train and evaluate Deep learning models in PyTorch
- Creating custom PyTorch dataset and dataloader
- Use convolution neural network for audio classification.
- Modular coding approach for training and prediction pipeline
- Building Flask App
- Learn about GCP basics
- CICD tool like Github Actions for deployment

Features

- Do Everything In Industry Grade Lab
- Learn As Per Your Timeline
- Hands-On Industry Real-Time Projects.
- Self Paced Learning
- Dashboard Access

Requirements

- System with minimum i3 processor or better
- At least 4 GB of RAM
- Working internet connection
- Dedication to learn

Course Curriculum

Welcome to the Course

- Course Overview

- Dashboard Introduction

Project :- Language Identification

- Introduction of Instructor
- Project Overview
- End Notes
- Problem Description
- Understand the application scope
- End Notes
- Solution Description
- Notebook Walkthrough
- Tour to Architecture diagram
- Cost involved
- End Notes
- Structure overview
- Data Ingestion
- Data Validation
- Data Transformation
- Model Training and Tunning
- Model Evaluation
- Model Pusher
- Training Pipeline
- Frontend app design
- Tour to the cloud and Service Overview
- IAM setup
- GCP setup
- Workflow
- Adding Self hosted runner
- Conclude the project
- Points to improve from current project
- Assignments & External Resources