Git Repository to be cloned:

https://github.com/MicrosoftLearning/mslearn-ai900

And

h\_ttps://github.com/MicrosoftLearning/AI-102-AIEngineer

Step by Step instructions for lab:

https://microsoftlearning.github.io/AI-102-AIEngineer/

Reference Documents:

https://aidemos.microsoft.com/

https://aidemos.microsoft.com/

https://aka.ms/learn-artificial-intelligence

Lab URL:

https://github.com/MicrosoftLearning/mslearn-ai900

Learning Path (Homework) - Create no-code predictive models with Azure Machine Learning https://aka.ms/no-code-ml

2. CNN:

https://aidemos.microsoft.com/computer-vision

https://docs.microsoft.com/en-us/azure/cognitive-services/form-recognizer/overview

3. Cognitive Services List --- Azure https://azure.microsoft.com/en-in/services/cognitive-services/#overview

https://westus.dev.cognitive.microsoft.com/docs/services

Monday, August 9, 2021 4:19 PM Outlook Id :

KarunaRatlani123@outlook.com

Welcome@123456

GitHub: Welcome@123456

Notebook - having all links

https://www.zippyjot.com/note/62116

Visual Studio to Git Hub:

https://code.visualstudio.com/docs/editor/github

Reference Links:

https://docs.microsoft.com/en-us/learn/paths/get-started-with-artificial-intelligence-on-azure/

https://docs.microsoft.com/en-

https://docs.microsoft.com/en-

https://docs.microsoft.com/en-us/learn/paths/explore-natural-language-processing/

https://docs.microsoft.com/en-us/learn/paths/explore-conversational-ai/

Link for e BOOK:

Azure ML E-Book - <a href="https://wiproblr2011.blob.core.windows.net/documents/AzureML.pdf">https://wiproblr2011.blob.core.windows.net/documents/AzureML.pdf</a> (Only for your self learning)

https://wiproblr2011.blob.core.windows.net/documents/AzureML.pdf (Only for your self learning)

To check balance credits:

https://www.microsoftazuresponsorships.com/

REFERENCE LINKS:

https://www.youtube.com/watch?v=pL-c00M2CnI

Azure Cognitive Services improves citizen engagement <a href="https://www.youtube.com/watch?v=mlGefGYNW3s">https://www.youtube.com/watch?v=mlGefGYNW3s</a>

DJI Drone Demo

https://www.youtube.com/watch?v=EruH-4Fvecc&t=4m57s

How Uber is using driver selfies to enhance security https://www.youtube.com/watch?v=aEBi4OpXU4Q

Artificial Intelligence takes the pain out of car insurance in India <a href="https://www.youtube.com/watch?v=jvLx6lcpFvc">https://www.youtube.com/watch?v=jvLx6lcpFvc</a>

Seeing AI 2016 Prototype

https://www.youtube.com/watch?v=R2mC-NUAmMk

Microsoft & Prism Skylabs: Using AI to help organizations search visual data https://www.youtube.com/watch?v=eltraK8wF6g&feature=youtu.be

Reference Link :

https://fott-2-1.azurewebsites.net/

Kindly find the AI-102 Course Code, Student Pass and LAB Login details below:

URL: https://digitallabs.palmeto.co.in

**Username:** Deloitte-Azure02 **Password:** P@Imeto@123

Microsoft Azure Student voucher Code: Q3671FDK1BC5DKDEMJ

Microsoft Course License code: REYM-KKTC-

QDNP-ONAM

https://www.skillpipe.com/ #/reader/urn:uuid:3263d0b0-2e42-534ba222-272bce964434@ 2021-07-12T09:28:22Z/content

For E- Books / Materials :

https://policies.skillpipe.com/service/faq/#user-guide



github.com/vedpd

User : AIUser

Pwd: Welcome@1234

#### Lab Environment Setup

- https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/00-setup.html

#### Lab Setup Part 2 - Enable Resource Providers

- https://microsoftlearning.github.io/Al-102-AlEngineer/Instructions/00-update-resource-providers.html

#### LAB Setup Part 2 - Enable Resource Providers

- <a href="https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/00-update-resource-providers.html">https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/00-update-resource-providers.html</a>

#### Lab Environment Setup

-https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/00-setup.html

#### Module 2 Lab 1 - Get Started with Cognitive Services

 $- \underline{\text{https://microsoftlearning.github.io/Al-102-AlEngineer/Instructions/01-get-started-cognitive-services.html} \\$ 

#### Lab 2 - Manage Cognitive Services Security

- https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/02-cognitive-services-security.html

#### LAB 3 - Monitor Cognitive Services

- https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/03-monitor-cognitive-services.html

#### Lab 4 - Use a Cognitive Services Container

- https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/04-use-a-container.html

#### Analyze Text:

Module 3 - Lab 1 - Analyze Text

https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/05-analyze-text.html

#### Lab 2 - Translate Text

- https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/06-translate-text.html

#### Module 4 Lab 1 Recognize and Synthesize Speech

https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/07-speech.html

Languages Supported in Speech - <a href="https://docs.microsoft.com/en-us/azure/cognitive-services/speech-service/language-support">https://docs.microsoft.com/en-us/azure/cognitive-services/speech-service/language-support</a>

## Module 4 Lab 2 - Translate Speech

https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/08-translate-speech.html

#### Translate speech - demo2:

https://docs.microsoft.com/en-us/learn/paths/process-translate-speech-azure-cognitive-speech-services/

Translator:- Speech -

Translate Speech to Speech in a different language (Py) Demo -

https://docs.microsoft.com/en-us/learn/modules/translate-speech-speech-service/3-translate-speech-different-language?pivots=python

#### Real Time Speech to Text translator:

https://anthonychu.ca/post/realtime-captioning-translation-cognitive-services-signalr-azure-functions/

#### Language Understanding:

Module 5 - Lab 1 - <a href="https://microsoftlearning.github.io/Al-102-AlEngineer/Instructions/09-language-understanding-app.html">https://microsoftlearning.github.io/Al-102-AlEngineer/Instructions/09-language-understanding-app.html</a>

LAB 2 - <a href="https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/10-language-understanding-client.html">https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/10-language-understanding-client.html</a>

Lab 3 - <a href="https://microsoftlearning.github.io/Al-102-AlEngineer/Instructions/11-language-understanding-speech.html">https://microsoftlearning.github.io/Al-102-AlEngineer/Instructions/11-language-understanding-speech.html</a>

#### Module 5 -> LUIS (Language Understanding) ->>

Lab 1 - <a href="https://microsoftlearning.github.io/Al-102-AlEngineer/Instructions/09-language-understanding-app.html">https://microsoftlearning.github.io/Al-102-AlEngineer/Instructions/09-language-understanding-app.html</a>

LAB 2 - <a href="https://microsoftlearning.github.io/Al-102-AlEngineer/Instructions/10-language-understanding-client.html">https://microsoftlearning.github.io/Al-102-AlEngineer/Instructions/10-language-understanding-client.html</a>

Lab 3 - <a href="https://microsoftlearning.github.io/Al-102-AlEngineer/Instructions/11-language-understanding-speech.html">https://microsoftlearning.github.io/Al-102-AlEngineer/Instructions/11-language-understanding-speech.html</a>

#### Module 6 Lab - Create a QnA Solution

https://microsoftlearning.github.io/Al-102-AlEngineer/Instructions/12-qna-maker.html

BOT:

LAb 1 https://microsoftlearning.github.io/Al-102-AlEngineer/Instructions/13-bot-framework.html

Lab 2 https://microsoftlearning.github.io/Al-102-AlEngineer/Instructions/14-bot-composer.html

#### **Bot Framework Emulator**

Follow the instructions at <a href="https://github.com/Microsoft/BotFramework-">https://github.com/Microsoft/BotFramework-</a> <a href="mailto:Emulator/blob/master/README.md">Emulator/blob/master/README.md</a> to download and install the latest stable version of the Bot Framework Emulator for your operating system.

#### **Bot Framework Composer**

Install from <a href="https://docs.microsoft.com/en-us/composer/install-composer">https://docs.microsoft.com/en-us/composer/install-composer</a>.

Thursday, August 12, 2021 9:18 AM COMPUTER VISION:

Module 8:

Lab 1 Analyze Images with Computer Vision

https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/15-computer-vision.html

Lab2 Analyze Video with Video Analyzer

https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/16-video-indexer.html

https://azure.microsoft.com/en-in/blog/live-stream-analysis-using-video-indexer/

https://docs.microsoft.com/en-us/azure/azure-video-analyzer/video-analyzer-for-media-docs/logic-apps-connector-tutorial

MODULE 9 - LAB 1 ->>Classify Images with Custom Vision

https://microsoftlearning.github.io/Al-102-AlEngineer/Instructions/17-image-classification.html

Lab 2 - Detect Objects in Images with Custom Vision

https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/18-object-detection.html

Detect, Analyze, and Recognize Faces

https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/19-face-service.html

Detect, Analyze, and Recognize Faces

Reference Link:

https://fott-2-1.azurewebsites.net/

OCR Lab:

Lab 1 https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/20-ocr.html

Read Text in Images

OCR and READ API

Lab 1 <a href="https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/20-ocr.html">https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/20-ocr.html</a>

Form Recognizer API Lab:

Lab 2 https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/21-form-recognizer.html

Sampling Tool:

https://docs.microsoft.com/en-us/azure/cognitive-services/form-recognizer/label-tool

Module 12 - Creating a Knowledge Mining Solution

LAB 1 - Create an Azure Cognitive Search solution

https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/22-azure-search.html

LAB 2 Create a Custom Skill for Azure Cognitive Search

https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/23-search-skills.html

LAB 3 Create a Knowledge Store with Azure Cognitive Search

https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/24-knowledge-store.html

# Al102\_Deloitte\_9-13Aug2021 Palmeto

\*\*\*\*\*\*

Microsoft Cognitive Services - https://azure.microsoft.com/enin/services/coanitive-services/

#### All API Documentation :-

https://westus.dev.cognitive.microsoft.com/docs/services?page=1

#### Microsoft Official Course Labs:-

https://microsoftlearning.github.io/Al-102-AlEngineer/

## **Workplace Safety Demonstration**

https://www.youtube.com/watch?v=pL-c00M2Cnl

**Azure Cognitive Services improves citizen engagement** 

https://www.youtube.com/watch?v=mlGefGYNW3s

**DJI Drone Demo** 

https://www.youtube.com/watch?v=EruH-4Fvecc&t=4m57s

How Uber is using driver selfies to enhance security

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Artificial Intelligence takes the pain out of car insurance in India

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Seeing Al 2016 Prototype

https://www.youtube.com/watch?v=R2mC-NUAmMk

Microsoft & Prism Skylabs: Using AI to help organizations search visual data https://www.youtube.com/watch?v=eltraK8wF6g&feature=youtu.be

# **Text Analytics -**

API Doc. -

https://westus.dev.cognitive.microsoft.com/docs/services/TextAnalytics.V2.0 /operations/56f30ceeeda5650db055a3c7

https://aidemos.microsoft.com/text-analytics

# Microsoft Learning Path and Exercises:-

https://docs.microsoft.com/en-us/learn/paths/explore-natural-languageprocessing/

Exercise - Analyze text with the Text Analytics service ->

https://docs.microsoft.com/en-us/learn/modules/analyze-text-with-textanalytics-service/3-exercise

Extra my Own Lab of Sentiment Analysis of Twitter (Home Work) :-

https://wiproblr2011.blob.core.windows.net/ai100natherland/Sentiment/Azure SentimentAnalysis\_LogicApps\_FunctionApps.docx

Text Analytics - https://aidemos.microsoft.com/text-analytics

### Microsoft Learning Path and Exercises:-

https://docs.microsoft.com/en-us/learn/paths/explore-natural-language-processing/

Exercise - Analyze text with the Text Analytics service ->

https://docs.microsoft.com/en-us/learn/modules/analyze-text-with-text-analytics-service/3-exercise

# MS Learning Paths and Exercises:-

Process and Translate Speech with Azure Cognitive Speech Services - <a href="https://docs.microsoft.com/en-us/learn/paths/process-translate-speech-azure-cognitive-speech-services/">https://docs.microsoft.com/en-us/learn/paths/process-translate-speech-azure-cognitive-speech-services/</a>

Process natural language with Azure Cognitive Language Services - <a href="https://docs.microsoft.com/en-us/learn/paths/process-natural-language-azure-cognitive-language-services/">https://docs.microsoft.com/en-us/learn/paths/process-natural-language-azure-cognitive-language-services/</a>

Language Understanding - <a href="https://github.com/MicrosoftLearning/mslearn-ai900/blob/main/10%20-%20Language%20Understanding.ipynb">https://github.com/MicrosoftLearning/mslearn-ai900/blob/main/10%20-%20Language%20Understanding.ipynb</a>

## **Exercise - Create a Language Understanding application -**

https://docs.microsoft.com/en-us/learn/modules/create-language-model-with-language-understanding/3-exercise-create-language-understanding-application

https://github.com/MicrosoftLearning/mslearn-ai900/blob/main/10%20-%20Language%20Understanding.ipynb

https://github.com/MicrosoftLearning/mslearn-ai900/blob/main/08%20-% 20Speech.ipynb

https://github.com/MicrosoftLearning/mslearn-ai900/blob/main/07%20-%20Text%20Analytics.

https://github.com/MicrosoftLearning/mslearn-ai900/blob/main/11%20-%20QnA%20Bot.ipynb

https://wiproblr2011.blob.core.windows.net/ai100natherland/CreateDeployEchoBot CSharp.docx

#### Build a bot with QnA Maker and Azure Bot Service Learn Path -

https://docs.microsoft.com/en-us/learn/modules/build-faq-chatbot-qna-maker-azure-bot-service/

https://docs.microsoft.com/en-us/learn/paths/explore-conversational-ai/ https://aidemos.microsoft.com/responsible-conversational-ai/building-atrustworthy-bot

# MS Learning Path Exercises:-

https://docs.microsoft.com/en-us/learn/modules/create-bot-with-bot-framework-composer/

https://docs.microsoft.com/en-us/learn/modules/build-faq-chatbot-qna-maker-azure-bot-service/

https://docs.microsoft.com/en-us/learn/paths/create-bots-with-the-azure-bot-service/

## Computer Vision API (v2.0) Check -

https://westus.dev.cognitive.microsoft.com/docs/services/5adf991815e1060e6355ad44/operations/56f91f2e778daf14a499e1fa

**Explore computer vision in Microsoft Azure Learn Path -**

https://docs.microsoft.com/en-us/learn/paths/explore-computer-vision-microsoft-azure/

Explore computer vision in Microsoft Azure 6 Learn Paths - <a href="https://aka.ms/explore-computer-vision">https://aka.ms/explore-computer-vision</a>

## **Explore computer vision in Microsoft Azure Learn Path -**

https://docs.microsoft.com/en-us/learn/paths/explore-computer-vision-microsoft-azure/

#### Labs:-

https://wiproblr2011.blob.core.windows.net/ai100natherland/compvision/05\_ServerlessWebApplication.zip

https://wiproblr2011.blob.core.windows.net/ai100natherland/compvision/01 AnalyzeRemoteImage.zip

https://wiproblr2011.blob.core.windows.net/ai100natherland/compvision/02 ComputerVisionAPI Csharp.zip

https://wiproblr2011.blob.core.windows.net/ai100natherland/compvision/03 ComputerVision QuickThumbnail.docx

https://wiproblr2011.blob.core.windows.net/ai100natherland/compvision/04 ComputerVision AnalyzeLocalImage.docx

# Home Work My Own Labs:-

- 1. <a href="https://wiproblr2011.blob.core.windows.net/ai100natherland/MOCLab/Lab0">https://wiproblr2011.blob.core.windows.net/ai100natherland/MOCLab/Lab0</a> CaseStudy Introduction.zip
- 2. <a href="https://wiproblr2011.blob.core.windows.net/ai100natherland/MOCLab/Lab1">https://wiproblr2011.blob.core.windows.net/ai100natherland/MOCLab/Lab1</a> TechnicalRequirements.zip
- 3. <a href="https://wiproblr2011.blob.core.windows.net/ai100natherland/MOCLab/Lab2\_lmplementComputerVision.zip">https://wiproblr2011.blob.core.windows.net/ai100natherland/MOCLab/Lab2\_lmplementComputerVision.zip</a>
- 4. https://wiproblr2011.blob.core.windows.net/ai100natherland/MOCLab/Lab3\_Creating\_Basic\_FilteringBot.zip
- 5. https://wiproblr2011.blob.core.windows.net/ai100natherland/MOCLab/Lab4\_LogChats.zip
- 7. https://wiproblr2011.blob.core.windows.net/ai100natherland/MOCLab/Lab6 Implementing LUIS Model.docx
- 8. https://wiproblr2011.blob.core.windows.net/ai100natherland/MOCLab/Lab7 Integrate LUIS into BotDialogs.docx
- 9. https://wiproblr2011.blob.core.windows.net/ai100natherland/MOCLab/Lab8
  DetectLanguage.docx

https://wiproblr2011.blob.core.windows.net/ai100natherland/MOCLab/Lab9\_ Test\_Bots\_DirectLine.docx

#### Face API Check -

https://westus.dev.cognitive.microsoft.com/docs/services/563879b61984550e 40cbbe8d/operations/563879b61984550f30395236

https://azure.microsoft.com/en-in/services/cognitive-services/face/#features FACE API Demo -

https://azure.microsoft.com/en-in/services/cognitive-services/face/#demo

# My Own Hands on Labs & Demos :-

https://wiproblr2011.blob.core.windows.net/ai100natherland/02 FaceAPI DetectFace.zip

https://wiproblr2011.blob.core.windows.net/ai100natherland/03
Integrate FaceAPI LogicApps OneDrive.zip

## Train a custom model using the sample labeling tool -

https://docs.microsoft.com/en-us/azure/cognitive-services/form-recognizer/label-tool?tabs=v2-1

https://docs.microsoft.com/en-us/learn/modules/intro-to-form-recognizer/https://docs.microsoft.com/en-us/learn/paths/extract-text-from-images-documents/

https://docs.microsoft.com/en-us/learn/modules/work-form-recognizer/https://docs.microsoft.com/en-us/learn/modules/work-form-recognizer/

AZ900 - Azure Fundamentals Detail Material :-

part 1: Describe core Azure concepts - <a href="https://docs.microsoft.com/en-us/learn/paths/az-900-describe-cloud-concepts/">https://docs.microsoft.com/en-us/learn/paths/az-900-describe-cloud-concepts/</a>

Azure Fundamentals part 2: Describe core Azure services -

https://docs.microsoft.com/en-us/learn/paths/az-900-describe-core-azure-services/

Azure Fundamentals part 3: Describe core solutions and management tools on Azure - <a href="https://docs.microsoft.com/en-us/learn/paths/az-900-describe-core-solutions-management-tools-azure/">https://docs.microsoft.com/en-us/learn/paths/az-900-describe-core-solutions-management-tools-azure/</a>

Azure Fundamentals part 4: Describe general security and network security features - <a href="https://docs.microsoft.com/en-us/learn/paths/az-900-describe-general-security-network-security-features/">https://docs.microsoft.com/en-us/learn/paths/az-900-describe-general-security-network-security-features/</a>

Azure Fundamentals part 5: Describe identity, governance, privacy, and compliance features - <a href="https://docs.microsoft.com/en-us/learn/paths/az-900-describe-identity-governance-privacy-compliance-features/">https://docs.microsoft.com/en-us/learn/paths/az-900-describe-identity-governance-privacy-compliance-features/</a>

Azure Fundamentals part 6: Describe Azure cost management and service level agreements - <a href="https://docs.microsoft.com/en-us/learn/paths/az-900-describe-azure-cost-management-service-level-agreements/">https://docs.microsoft.com/en-us/learn/paths/az-900-describe-azure-cost-management-service-level-agreements/</a>

#### AZ900 22 Labs :-

https://microsoftlearning.github.io/AZ-900T0x-MicrosoftAzureFundamentals/

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\*\*\*\*\*\*\*\*\*\*\*\*

REAL TIME CONTOSO HELATHCARE CASE STUDY Implementation: https://wiproblr2011.blob.core.windows.net/share/deloitteai102/Al-led-business-process-automation.zip

Azure ML E-Book for Dp100 -

https://wiproblr2011.blob.core.windows.net/documents/AzureML.pdf

**Sample Reference Question Papers -**

https://wiproblr2011.blob.core.windows.net/share/deloitteai102/Al102 Que.zip https://wiproblr2011.blob.core.windows.net/share/deloitteai102/dp100.zip

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All the Best for Exam

Thanks
Suketu Nayak
Suketunayak@gmail.com
Cell - 992 555 2595

Note created 8/12/2021 8:37:46 AM

From < https://www.zippyjot.com/note/62116>