IoT-Vision Enabled Assistant for Epileptic Patients Course Title Finalization



Session: 2020 - 2024

Submitted by:

Muhammad Ali Murtaza	2020-CS-114
Ali Tariq	2020-CS-142
Khadija Asif	2020-CS- 143
Syed Azeem Ali Hashmi	2020-CS-156

Supervised by:

Mr. Samyan Qayyum Wahla

Department of Computer Science

University of Engineering and Technology Lahore Pakistan

Contents

1	Course	e Details		
	1.1	Introduc	etion to Computer vision	
		1.1.1	Course Description	
		1.1.2	Assigned To	
		1.1.3	Course Link	
	1.2	Deep Le	arning Specialization	
		1.2.1	Course Description	
		1.2.2	Assigned To	
		1.2.3	Course Link	
	1.3	Machine Learning Engineering for Production (MLOp		
		cializatio	on	
		1.3.1	Course Description	
		1.3.2	Assigned To	
		1.3.3	Course Link	
	1.4	IBM Ap	plied Devops Engineering Professional certificate 2	
		1.4.1	Course Description	
		1.4.2	Assigned To	
		1 4 3	Course Link	

Courses 1

1 Course Details

1.1 Introduction to Computer vision

1.1.1 Course Description

Introduction to computer vision is a beginner-level course offered by Dr. Mubarak Shah. This course covers all the fundamentals required by a beginner in Computer Vision.

1.1.2 Assigned To

M Ali Murtaza (2020-CS-114)

1.1.3 Course Link

https://www.youtube.com/watch?v=715uLCHt4jE&list=PLmyoWnoyCKo8epWKGHAm4m_SyzoYhslk5

1.2 Deep Learning Specialization

1.2.1 Course Description

Deep Learning Specialization is a full fledge course offered by Coursera. Its an extensive specialization especially made to master deep learning concepts. Following are the learning outcomes of the course.

- Build and train deep neural networks, identify key architecture parameters, implement vectorized neural networks and deep learning to applications
- Train test sets, analyze variance for DL applications, use standard techniques and optimization algorithms, and build neural networks in TensorFlow
- Build a CNN and apply it to detection and recognition tasks, use neural style transfer to generate art, and apply algorithms to image and video data
- Build and train RNNs, work with NLP and Word Embeddings, and use HuggingFace tokenizers and transformer models to perform NER and Question Answering

1.2.2 Assigned To

Khadija Asif (2020-CS-143)

1.2.3 Course Link

https://www.coursera.org/specializations/deep-learning

Courses 2

1.3 Machine Learning Engineering for Production (MLOps) Specialization

1.3.1 Course Description

Machine Learning Engineering for Production (MLOps) Specialization is a full fledge course offered by Coursera. Its an extensive specialization especially made to master MLOps concepts. Following are the learning outcomes of the course.

- Design an ML production system end-to-end: project scoping, data needs, modeling strategies, and deployment requirements.
- Establish a model baseline, address concept drift, and prototype how to develop, deploy, and continuously improve a productionized ML application.
- Build data pipelines by gathering, cleaning, and validating datasets. Establish data lifecycle by using data lineage and provenance metadata tools.
- Apply best practices and progressive delivery techniques to maintain and monitor a continuously operating production system.

1.3.2 Assigned To

Ali Tariq (2020-CS-142)

1.3.3 Course Link

https://shorturl.at/cuvFS

1.4 IBM Applied Devops Engineering Professional certificate

1.4.1 Course Description

IBM Applied Devops Engineering Professional is a full fledge course offered by Coursera. Its an extensive specialization especially made to master DevOps concepts. Following are the learning outcomes of the course.

- Write quality agile user stories, estimate and assign story points to them, and track stories using a kanban board on ZenHub
- Develop and execute unit tests with test driven development (TDD) methods including coverage reports, factories, fakes, and mock objects

Courses 3

• Develop RESTful Python microservices, test with TDD methods, practice CI/CD, and deploy using serverless and container technologies like Kubernetes

• Gain technical experience through hands on labs and projects and build a portfolio to demonstrate your job readiness

1.4.2 Assigned To

Syed Azeem Ali Hashmi (2020-CS-156)

1.4.3 Course Link

https://shorturl.at/hrvI2