Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)
BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
No.173, Agharam Road, Selaiyur, Chennai . T.N - 600 073.

Requisition Letter

Date:08.05.2022

From
Dr. K.P.Kaliyamurthie,
Professor & Head,
Department of CSE,
Bharath Institute of Higher Education and Research,
Chennai

To
The Dean Engineering,
Bharath Institute of Higher Education and Research,
Chennai

Respected sir

Subject: Request of Permission to conduct a value-added course on **"Introduction to Tensor flow for Artificial Intelligence, Machine Learning & Deep Learning"** -Reg

With reference to above subject, I would like to bring to your kind notice that, our department interested to organize value added course on **"Introduction to Tensor flow for Artificial Intelligence, Machine Learning & Deep Learning"** in our campus premises on **12.05.2022**, students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing 1:30 PM to 4:30 PM(AN)

Submitted to Principal for approval to organize this value-added course.

HOD

DEAN ENGINEERING

HEAD OF DEPARTMENT
Department of Computer Sci... & Engg.,
Bharath Institute of Higher Education & Research
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Chennai-600 073. INDIA

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CIRCULAR

08-05-2022

The School of computing, BharathInstitute of Higher Education and Research is planned to conduct a certification value added course on "**Introduction to Tensor flow for Artificial Intelligence, Machine Learning, and Deep Learning** " for the benefit of II, III and IV year students. This course is scheduled from 12-05-2022 for 30 hours which includes theory and practical. The timings are I :30PM to 4:30 PM

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course

SNo	Name of the Faculty	Designation
1	Mr.K.Sivaraman	Assistant Professor
2	Mr,B.Sundarrajan	Assistant Professor

Head of Department

To

Copy to CSE

Copy to IT

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CERTIFICATE COURSE ON INTRODUCTION TO TENSOR FLOW FOR ARTIFICIAL INTELLIGENCE, MACHINE LEARNING AND DEEP LEARNING

Date of Introduction of the Course: 12.05.2022

COURSE SYLLABUS

1.A New Programming Paradigm

Basics to Mastery of TensorFlow. We're excited you're here! In week 1 you'll get a soft introduction to what Machine Learning and Deep Learning are, and how they offer you a new programming paradigm, giving you a new set of tools to open previously unexplored scenarios. All you need to know is some very basic programming skills, and you'll pick the rest up as you go along. You'll be working with code that works well across both TensorFlow 1.x and the TensorFlow 2.0 alpha. To get started, check out the first video, a conversation between Andrew and Laurence that sets the theme for what you'll study.

2.Introduction to Computer Vision

Machine Learning and Deep Learning is a new programming paradigm. This week you're going to take that to the next level by beginning to solve problems of computer vision with just a few lines of code! Check out this conversation between Laurence and Andrew where they discuss it and introduce you to Computer Vision.

3.Enhancing Vision with Convolutional Neural Networks

Basic Neural Network for Computer Vision. It did the job nicely, but it was a little naive in its approach. This week we'll see how to make it better, as discussed by Laurence and Andrew here.

4.Using Real-world Images

Deep neural network using convolutions. It was a good start, but the data you used was very basic. What happens when your images are larger, or if the features aren't always in the same place? Andrew and Laurence discuss this to prepare you for what you'll learn this week: handling complex images

COURSE OBJECTIVES

This course is part of the upcoming Machine Learning in Tensorflow Specialization and will teach you best practices for using TensorFlow, a popular open-source framework for machine learning.

The Machine Learning course and Deep Learning Specialization from Andrew Ng teach the most important and foundational principles of Machine Learning and Deep Learning. This new deeplearning.ai TensorFlow Specialization teaches you how to use TensorFlow to implement those principles so that you can start building and applying scalable models to real-world problems. To develop a deeper understanding of how neural networks work, we recommend that you take the Deep Learning Specialization.

Specifically, the course has the following objectives:

Students will learn

1) Learn best practices for using TensorFlow, a popular open-source machine learning framework
2) Build a basic neural network in TensorFlow
3) Train a neural network for a computer vision application
4) Provide a pure Java AOP implementation, focused on solving common problems in J2EE
5) Understand how to use convolutions to improve your neural network

COURSE COORDINATOR

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CERTIFICATE COURSE ON INTRODUCTION TO TENSOR FLOW FOR ARTIFICIAL INTELLIGENCE, MACHINE LEARNING AND DEEP LEARNING

Date of Introduction of the Course: 12.05.2022

The timings are 1:30 PM to 4:30 PM from Friday (AN) and Saturday (FN&AN).

Time Table& Lesson plan

CLASS	DATE	TOPIC
1,2	12-05-2022(AN)	1. **A New Programming Paradigm** Basics to Mastery of TensorFlow. We're excited you're here! In week 1 you'll get a soft introduction to what Machine Learning and Deep Learning are, and how they offer you a new programming paradigm, giving you a new set of tools to open previously unexplored scenarios.
3,4	13-05-2022(FN)	2.Basic programming skills To get started, check out the first video, a conversation between Andrew and Laurence that sets the theme for what you'll study.
5,6	13-05-2022(AN)	3. **Introduction to Computer Vision** Machine Learning and Deep Learning is a new programming paradigm.
7,8	19-05-2022(AN)	4. **Computer Vision** This week you're going to take that to the next level by beginning to solve problems of computer vision with just a few lines of code! Check out this conversation between Laurence.

9,10	20-05-2022(AN)	5. **introduce you to Computer Vision.** Andrew where they discuss it and introduce you to Computer Vision.
11,12	20-05-2022(FN)	6. **Enhancing Vision** basic Neural Network for Computer Vision. It did the job nicely, but it was a little naive in its approach.
13,14	26-05-2022(AN)	7. **Convolutional Neural Networks** This week we'll see how to make it better, as discussed by Laurence and Andrew here.
15,16	27-05-2022(AN)	8. **Using Real-world Images** deep neural network using convolutions. It was a good start, but the data you used was very basic.
17,18	27-05-2022(AN)	9. **Real-world Images** . What happens when your images are larger, or if the features aren't always in the same place?
19,20	02-06-2022(FN)	10. complex images Andrew and Laurence discuss this to prepare you for what you'll learn this week: handling complex images
21,22	03-06-2022(AN)	11. programming skills All you need to know is some very basic programming skills, and you'll pick the rest up as you go along.
23,24	03-06-2022(AN)	12. TensorFlow You'll be working with code that works well across both TensorFlow 1.x and the TensorFlow 2.0 alpha.
25,26	09-06-2022(AN)	13. **Real-world Images** . What happens when your images are larger, or if the features aren't always in the same place?
27,28	10-06-2022(FN)	14. programming skills All you need to know is some very

		basic programming skills, and you'll pick the rest up as you go along
29,30	**10-06-2022(AN)**	**15. Using Real-world Images** deep neural network using convolutions. It was a good start, but the data you used was very basic.

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CERTIFICATE COURSE ON INTRODUCTION TO TENSOR FLOW FOR ARTIFICIAL INTELLIGENCE , MACHINE LEARNING , AND DEEP LEARNING

Date of Introduction of the Course: 12.05.2022

School of Computing

Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U14CS001	AADHITYA MALLIKA ARJUN
2	U14CS002	AAVULA DIXITH REDDY
3	U14CS003	ABDUL RAHIM.M
4	U14CS004	ABDUL RAZVI .M.K
5	U14CS005	ABDUR RASEED
6	U14CS006	ABHIKAMALI .A
7	U14CS007	ABHISHEK MANDURI
8	U14CS008	AJAY.D
9	U14CS009	AKASH CHANDRA AMBASTHA
10	U14CS010	AKHIL REDDY.G
11	U14CS011	AKSHAY.R
12	U14CS012	AMAR BASUMATARY
13	U14CS013	ANDREW JOSEPH.V
14	U14CS015	ANKITA
15	U14CS016	ANNILKRISHNAN .K
16	U14CS017	ASHUTOSH SRIVASTAVA
17	U14CS019	ARAMBAKAM,YASWANTH
18	U14CS021	AREEF SYED
19	U14CS022	ARUN KUMAR SINGH
20	U14CS023	ASIF NAZIR WANI
21	U14CS024	ATUL ANAND
22	U14CS025	BACHU HARISH
23	U14CS027	BALAJI SINGH. T
24	U14CS029	BALAKRISHNAN.T

25	U14CS031	BISHAL BANIK
26	U14CS033	BOORAGADDA VAMSI KRISHNA
27	U14CS034	BOYAPATI VINAY
28	U14CS035	BYSANI VENKAT SANDEEP
29	U14CS038	CHIDIRALA.SAI SHANKAR
30	U14CS040	CHINTAPANTI SRIKANTH
31	U14CS042	CHUDAAMANI.V
32	U14CS045	DEEPAKSANKAR REDDY.M
33	U14CS046	DEVARAPALLI HIMAKAR
34	U14CS047	DEVULAPALLY NAGARAJU
35	U14CS048	DIVYA RUPINI.B

COURSE COORDINATOR **HEAD OF THE DEPARTMENT**

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CERTIFICATE OF PARTICIPATION

This certificate is presented to

DIVYA RUPINI.B

For actively participating in the value added course on **" Introduction to Tensor flow for Artificial Intelligence, Machine Learning and Deep Learning "**Conducted by School of Computing, BIHER from 12.05.2022 to 10.06.2022 .

COURSE COORDINATORS
DIRECTOR

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COURSE FEEDBACK FORM

Academic Year		2022					
Term		–					
Course Number							
Course Title		Introduction to Tensor flow for AI & machine learning & Deep learning					
Number of Credits		-					
Type of Course	Regular		Elective		Add-on	✓	

I.	**Information on the Respondent: (Tick (√) Appropriately)**									
1.	**Percentage of classes attended**									
	0-20		20-40		40-60		60-80	✓	80-100	
2.	**Number of hours per week spent on the course (Other than lecture hours)**									
	0-2		2-4		4-6		6-8		8-10	✓

3.	**Preparation for the course by the student:**		
	(i)	Have done part of this course earlier	NO
	(ii)	Has adequate prior exposure to the prerequisites	NO
	(iii)	Had to pickup relevant additional topics through concurrent study	yes
	(iv)	Have no exposure to the background material	NO
4.	**The expectations for taking the course by the student are:**		
	(a)	Enhance by skill base in the area of specializations	yes
	(b)	Get exposed to a relevant subject	yes
	(c)	Curiosity	yes
	(d)	Better Employment Opportunity	yes
	(e)	Complete Course requirements	yes
	(f)	To Improve CGPA	yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression		✓			
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class		✓			
7.	Others (please specify					

A: Excellent		**B: Very Good**		**C: Good**	✓	**D: Satisfactory**		**E: Poor**	

HEAD OF THE DEPARTMENT

COURSE FEEDBACK FORM

Academic Year		2022					
Term		-					
Course Number		-					
Course Title		Introduction to Tensor flow for AI & machine learning & Deep learning.					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I.	**Information on the Respondent: (Tick (√) Appropriately)**									
1.	**Percentage of classes attended**									
	0-20		20-40		40-60		60-80	✓	80-100	
2.	**Number of hours per week spent on the course (Other than lecture hours)**									
	0-2		2-4		4-6		6-8		8-10	✓

3.	**Preparation for the course by the student:**		
	(i)	Have done part of this course earlier	NO
	(ii)	Has adequate prior exposure to the prerequisites	NO
	(iii)	Had to pickup relevant additional topics through concurrent study	Yes
	(iv)	Have no exposure to the background material	NO
4.	**The expectations for taking the course by the student are:**		
	(a)	Enhance by skill base in the area of specializations	yes
	(b)	Get exposed to a relevant subject	yes
	(c)	Curiosity	yes
	(d)	Better Employment Opportunity	yes
	(e)	Complete Course requirements	yes
	(f)	To Improve CGPA	yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
4.	Level of preparation		✓			
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓				
7.	Others (please specify					

A: Excellent		**B: Very Good**		**C: Good**	✓	**D: Satisfactory**		**E: Poor**	

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