Certificate Course

On

AI & ML Concepts

18/04/2022 to 30/04/2022

Coordinators: Dr. M.Sreenivasulu

Smt.B.Gouri

K.S.R.M. COLLEGE OF ENGINEERING
(UGC-AUTONOMOUS)
Kadapa, Andhra Pradesh, India– 516 003
Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.

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Lr./KSRMCE/ CSE /AI & ML Concepts /Certification Course/2022   Date: 09.04.2022

To
The principal,
K.S.R.M. College of Engineering,
Kadapa.

From
Dr.M. Sreenivasulu,
Professor,
Department Of CSE,
K.S.R.M. College of Engineering,
Kadapa.

Respected Sir,

Sub: KSRMCE - Permission to conduct Certification Course on **AI & ML Concepts** -Department of CSE
– Requested - Reg.

It is being brought to your kind notice that, with reference to the cited, the Department of Computer Science and Engineering is planning to organise Certification Course on "**AI & ML Concepts**"for B. Tech CSE IV SEM Students **from 18th April 2022 to 30th April 2022**.The Course Coordinators are Dr. M. Sreenivasulu, Professor, and B. Gouri, Assistant professor, in department of CSE. In this regard I Kindly request you Sir to grant the permission for organizing Certification Course in offline mode. This is submitted for your kind perusal.

Thanking you Sir,

Forwarded to the principal sir,

Yours Faithfully,

Dr.M. Sreenivasulu,
Professor in Department Of CSE,
K.S.R.M.C.E,(Autonomous)-Kadapa.

Cc:

To The Directorfor Information

To All Deans /HOD's

Permitted
V. S. S. Mully
PRINCIPAL
K.S.R.M. COLLEGE OF ENGINEERING
KADAPA - 516 003. (A.P.)

K.S.R.M. COLLEGE OF ENGINEERING
(UGC-AUTONOMOUS)
Kadapa,Andhra Pradesh, India– 516 003

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Cr./KSRMCE/CSE Dept/ AI & ML Concepts /Certification Course /2022   Date:09-04-2022

<u>Circular</u>

All CSE B. Tech IV Sem Students are hereby informed that department of Computer Science and Engineering is going to organize 30 Hours certification course on "AI & ML Concepts" from 18th April 2022 to 30th April 2022.The Course Coordinators are Dr. M. Sreenivasulu, Professor and B. Gouri, Assistant Professor in CSE department. So interested students may register their names with "AI & ML Concepts" Certification Course on or before 13th April 2022.

HOD

Cc to:

The Director for information

All Deans/HODs

Certificate Course on AI&ML Concepts

Certificate Course on AI&ML Concepts for B.Tech Students(18/04//2022 to 30/04/2022)

* Required

1. Name of the Student: *

   _____

2. Roll Number: *

   _____

3. Branch: *

   Mark only one oval.

   ◯ CSE

4. B.Tech: *

   Mark only one oval.

   ◯ IV Sem

   ◯ VI Sem

   VIII Sem

5. Mobile Number: *

   _____

6. Email ID *

   _____

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(AUTONOMOUS)
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Andhra Pradesh, India

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Department of Computer Science & Engineering

Certificate Course on AI & ML Concepts

Registered Student List

No.	Roll Number	Name of the Student	Year & Branch	Email id
1	209Y1A0502	A.Sainath Reddy	IV SEM	209y1a0502@ksrmce.ac.in
2	209y1a0505	A.gangadhar	IV SEM	209y1a0505@ksrmce.ac.in
3	209Y1A0536	C.Manikanta	IV SEM	209y1a0536@ksrmce.ac.in
4	209Y1A0539	C.Ranganayakulu	IV SEM	209y1a0539@ksrmce.ac.in
5	209Y1A0541	C,R Ravindra	IV SEM	209y1a0541@ksrmce.ac.in
6	209y1a0542	C jagadeesh Reddy	IV SEM	209y1a0542@ksrmce.ac.in
7	209Y1A0543	D.Praveen	IV SEM	209y1a0543@ksrmce.ac.in
8	209Y1A0545	Dandu Ajay	IV SEM	209y1a0545@ksrmce.ac.in
9	209Y1A0551	D. Umar Farooq	IV SEM	209y1a0551@ksrmce.ac.in
10	209Y1A0567	G. Kavya	IV SEM	209y1a0567@ksrmce.ac.in
11	209y1a0568	GURRAMKONDA UMARFAROOK	IV SEM	209y1a0568@ksrmce.ac.in
12	209Y1A0574	K.Prasanth	IV SEM	209y1a0574@ksrmce.ac.in
13	209y1a0577	K.Yaswanth	IV SEM	209y1a0577@ksrmce.ac.in
14	209Y1A05a2	M.Shophiya	IV SEM	209y1a05a2@ksrmce.ac.in
15	209Y1A05A5	M.Aditya	IV SEM	209y1a05A5@ksrmce.ac.in
16	209Y1A05B6	P. BHOOMIKA	IV SEM	209y1a05b6@ksrmce.ac.in
17	209Y1A05B9	P.SAI KRISHNAREDDY	IV SEM	209y1a05b9@ksrmce.ac.in
18	209y1a05d6	Rachagalla Suvidha	IV SEM	209y1a05d6@ksrmce.ac.in
19	209Y1A05E7	Shaik.Afzal	IV SEM	209y1a05e7@ksrmce.ac.in

20	209Y1A05F6	Shaik.Rehanuma	IV SEM	209y1a05f6@ksrmce.ac.in
21	209Y1A05G2	S.Rishitha	IV SEM	209y1a05g2@ksrmce.ac.in
22	209y1a05g3	S RAVI KRISHNA	IV SEM	209y1a05g3@ksrmce.ac.in
23	209Y1A05G4	S.Mohammed Hussain	IV SEM	209y1a05g4@ksrmce.ac.in
24	209Y1A05G5	Suru nagajyothi	IV SEM	209y1a05g5@ksrmce.ac.in
05	209Y1A05G7	Syed Syed Ammaji	IV SEM	209y1a05g7@ksrmce.ac.in
26	209Y1A05H6	V LAKSHMINARAYANA	IV SEM	209y1a05h6@ksrmce.ac.in
27	209Y1A05H9	Myna Veeramreddy	IV SEM	209y1a05h9@ksrmce.ac.in
28	209Y1A05I3	Prathyusha Vennapusa	IV SEM	209y1a05i3@ksrmce.ac.in
29	209Y1A05I8	Y.Hameeda bhanu	IV SEM	209y1a05i8@ksrmce.ac.in
30	219Y5A0503	Bathala Raja Rajeswari	IV SEM	219y5a0503@ksrmce.ac.in
31	219y5a0520	Y.PAVAN KUMAR REDDY	IV SEM	219y5a0520@ksrmce.ac.in

Coordinators

Dr. V. LOKESWARA REDDY **HOD**
M.Tech., Ph.D.,
Professor & HOD CSE
K.S.R.M. College of Engineering (Autonomous)
KADAPA - 516 005.

K.S.R.M. COLLEGE OF ENGINEERING

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Kadapa, Andhra Pradesh, India– 516 003

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Department of Computer Science & Engineering
Academic Year – 2021-22
Certification Course on AI & ML Concepts

Course Objectives:

- To learn different knowledge representation techniques
- To understand the applications of AI.
- To able to the formulate Machine Learning problems corresponding to different applications.
- To understand the range of Machine Learning Algorithms along with their strengths and weaknesses.

Course Outcomes:

1. Given a search problem, analyze and formalize the problem (as a state space, graph, etc.).
2. Ability defines admissible and consistent heuristics and completeness and optimality.
3. Able to understand the basic knowledge Machine Learning.
4. Able to understand different Machine Learning Algorithms and Methods.

UNIT-I: Introduction to AI: Definition, History, Application of an AI, what is an AI Technique?

UNIT-II: Problem, Problem Definition, Problem Space and Search, Example Problems: Tic-Tac-Toe, Water Jug problem.

UNIT III: Introduction to Machine Learning: Introduction, Different types of learning, Applications of Machine Learning.

UNIT IV: Training and test sets, cross validation. Linear Regression: Introduction, Linear Models for Regression.

Unit –V: Introduction, Decision tree representation, appropriate problems for decision tree learning, the basic decision tree algorithm.

Text Books:

1. Rich, Knight, Nair: Artificial intelligence, Tata McGraw Hill, Third Edition 2009.
2. Russell, Norvig: Artificial intelligence, A Modern Approach, Pearson Education, Second Edition. 2004.
3. Machine Learning, Tom M.Mitchell, McGraw-Hill
4. Machine Learning: A Probabilistic Perspective,KevinMurphy,MITPress,2012

Reference Books:

1. Charu C. Aggarwal,Artificial Intelligence,Springer,2021.
2. Peter Norvig, Paradigms of Artificial Intelligence Programming: Case Studies in Common Lisp.
3. Machine Learning: The Art and Science of Algorithms That Make Sense of Data, Peter Flash, Cambridge, University Press
4. The Elements of Statistical Learning, Trevor Hastie, Robert Tibshi rani, Jerome Friedman, Springer, 2009.

Web Links:

➢ https://onlinecourses.nptel.ac.in/noc22_cs56/preview
➢ https://nptel.ac.in/courses/111107137

Dr. V. LOKESWARA REDDY
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Department of Computer Science & Engineering

Certificate Course on AI & ML Conepts
Schedule

Sessions	Date	Time	Description of the Topics
Session1	18.04.2022	2PM to 5PM	• Introduction • AI Definition • Applications
Session2	19.04.2022	2PM to 5PM	• AI Techniques: • Search • Use of Knowledge • Abstract
Session3	20.04.2022	2PM to 5PM	• Tic Tac Tac Problem • Water Jug Problem • 8 Puzzle Problem
Session4	21.04.2022	2PM to 5PM	• Problem Characteristics
Session5	22.04.2022	2PM to 5PM	• Machine Learning introduction
Session6	23.04.2022	2PM to 5PM	• Data sets collection & Sklearn introduction
Session7	25.04.2022	2PM to 5PM	• Importing data sets • preprocessing
Session8	26.04.2022	3PM to 5PM	• Practical session for importing data & Processing
Session9	27.04.2022	3PM to 5PM	• Linear Regression Theory
Session10	28.04.2022	3PM to 5PM	• Practical session for importing Linear Regression
Session11	29.04.2022	3PM to 5PM	• Classification
Session12	30.04.2022	3PM to 5PM	• Practical session for importing Decision Tree

Coordinator

Dr. V. LOKESWARA REDDY
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Department of Computer Science & Engineering
Academic Year – 2021-22
Certification Course on AI & ML Concepts
Attendance Form

Sno	Roll No	18.04.22	19.04.22	20.04.22	21.04.22	22.04.22	23.04.22	25.04.22	26.04.22	27.04.22	28.04.22	29.04.22	30.04.22
1	209Y1A0502	P	P	P	P	P	P	P	P	A	P	P	P
2	209y1a0505	P	A	A	P	P	P	P	P	P	P	A	P
3	209Y1A0536	P	P	P	P	P	P	P	P	P	P	P	P
4	209Y1A0539	P	P	P	P	A	P	P	P	P	P	P	P
5	209Y1A0541	P	P	P	P	P	P	P	P	P	P	P	P
6	209y1a0542	P	P	P	P	P	P	P	P	P	P	P	P
7	209Y1A0543	P	P	P	P	P	P	A	P	P	P	P	P
8	209Y1A0545	P	P	P	P	P	P	P	P	A	P	P	P
9	209Y1A0551	P	P	P	P	P	P	P	P	P	P	P	P
10	209Y1A0567	P	P	A	P	P	P	P	P	P	P	P	P
11	209y1a0568	P	P	P	P	P	P	P	P	P	P	P	P
12	209Y1A0574	P	P	P	P	P	P	P	P	P	P	P	P
13	209y1a0577	P	P	P	P	P	P	P	P	P	P	P	P
14	209Y1A05a2	P	P	P	P	A	P	P	P	A	P	P	
15	209Y1A05A5	P	P	A	P	P	P	P	P	P	P	A	
16	209Y1A05B6	P	P	P	P	P	P	P	A	P	P	P	P

17	209Y1A05B9	A	P	P	A	P	P	P	P	A	P	P	P
18	209y1a05d6	P	A	P	P	P	P	P	A	P	P	P	P
19	209Y1A05E7	P	P	P	P	P	P	P	P	P	P	P	P
20	209Y1A05F6	P	P	A	P	P	P	P	P	P	P	A	P
21	209Y1A05G2	P	P	P	P	P	P	P	P	P	P	P	P
22	209y1a05g3	P	A	P	P	P	P	A	P	P	P	P	A
23	209Y1A05G4	P	P	P	P	P	P	P	P	P	P	P	P
24	209Y1A05G5	P	P	A	P	P	P	P	P	A	P	P	P
25	209Y1A05G7	P	P	P	P	P	P	P	P	P	P	P	P
26	209Y1A05H6	A	P	P	P	P	P	A	P	P	P	P	A
27	209Y1A05H9	P	P	P	P	P	P	P	P	P	P	P	P
28	209Y1A05I3	P	A	P	P	P	P	P	P	A	P	P	Pi
29	209Y1A05I8	P	P	P	P	P	P	P	P	P	P	P	P
30	219Y5A0503	P	P	A	P	P	P	P	P	P	A	P	P
31	219y5a0520	P	P	P	P	P	P	P	P	P	P	P	P

Coordinator

HOD

Dr. V. LOKESWARA REDDY
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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Certification Course on
" AI & ML Concepts "

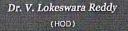**18.04.2022 To 30.04.2022**

MB 301

Coordinator & Resource Persons
Dr.M. Sreenivasulu,
Professor in CSE Dept.
B.Gouri,
Asst.Prof in CSE Dept.

Reg Link : https://forms.gle/WgntgzEGzLEYTPnm6

| Dr. V. Lokeswara Reddy (HOD) | Dr. V.S.S. Murthy (Principal) | Dr. Kandula Chandra Obul Reddy (MD, KGI) | Smt. K.Rajeswari (Correspondent,Secretary,Treasurer) | Sri K. Madan Mohan Reddy (Vice – Chairman) | Sri K. Raja Mohan Reddy (Chairman) |

K.S.R.M. COLLEGE OF ENGINEERING
(UGC- AUTONOMOUS)
Kadapa,Andhra Pradesh, India– 516 003
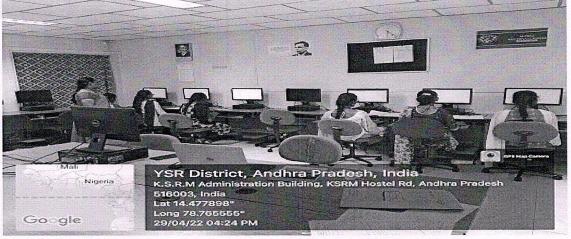### Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.

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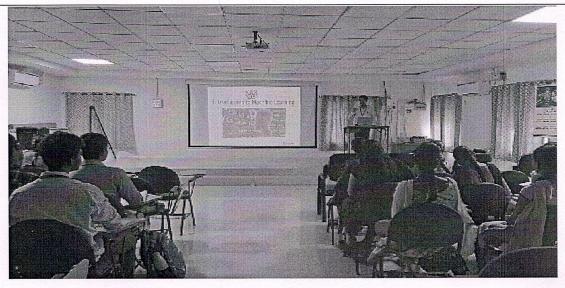
Activity Report

Name of the Activity	Certification Course on **"AI & ML Concepts"**
Type of Activity	Certification Course
Date and Time of Activity	18[th]April, 2022 to 30th April,2022 4PM to 6PM
Details of Participants	B. Tech IV Sem Students from CSE Branch
Coordinator(s)	Dr. M. Sreenivasulu, Professor, Dept., of CSE, KSRMCE, Kadapa Smt. B. Gouri, Asst. Professor, Dept., of CSE, KSRMCE, Kadapa
Organizing Dept./Support System	Computer Science and Engineering
Description	This course is designed to make the participants capable of solving problems using Artificial Intelligence related technologies. After completing the course, the participants will be capable of formulating AI problems that can be solved with the raw data available in different domains. They will be able to do basic data analysis and machine learning model development with structured data. They will also be able to do suitable predictions and decision making by handling unstructured data including text, images and video using deep learning and natural language processing.
Photos	

YSR District, Andhra Pradesh, India
K.S.R.M Administration Building, KSRM Hostel Rd, Andhra Pradesh
516003, India
Lat 14.477898°
Long 78.765555°
28/04/22 04:42 PM

YSR District, Andhra Pradesh, India
K.S.R.M Administration Building, KSRM Hostel Rd, Andhra Pradesh
516003, India
Lat 14.477898°
Long 78.765555°
29/04/22 04:24 PM

Coordinator

HOD

Dr. V. LOKESWARA REDDY
M.Tech., Ph.D.,
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KADAPA - 516 005.

K.S.R.M. COLLEGE OF ENGINEERING

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

CERTIFICATE OF PARTICIPATION

This is to certifiy that Mr/Miss . _____**Shaik.Afzal**_____

bearing Roll No_____**209Y1A05E7**_____ participated in a Certification course on " AI & ML Concepts " organized by Department of Computer Science and Engineering from 18th to 30th April, 2022.

Coordinator

HOD CSE

Principal

K.S.R.M. COLLEGE OF ENGINEERING

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Kadapa, Andhra Pradesh, India– 516 003
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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

CERTIFICATE OF PARTICIPATION

This is to certifiy that *Mr/Miss* . **S.Mohammed Hussain**

bearing Roll No **209Y1A05G4** participated in a Certification course on " AI & ML Concepts " organized by Department of Computer Science and Engineering from 18th to 30th April, 2022.

Coordinator

HOD CSE

Principal

K.S.R.M. COLLEGE OF ENGINEERING

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

CERTIFICATE OF PARTICIPATION

This is to certifiy that *Mr/Miss* . **P. BHOOMIKA**

bearing Roll No **209Y1A05B6** participated in a Certification course on " AI & ML Concepts " organized by Department of Computer Science and Engineering from 18th to 30th April, 2022.

Coordinator

HOD CSE

Principal

Feedback form on Certificate Course

AI & ML Concepts (18/04/2022 to 30/04/2022)

* Required

1. Roll Number *

    _____

2. Name of the Student *

    _____

3. B.Tech Semester *

    Mark only one oval.

    ◯ IV Sem

    ◯ VI Sem

    ◯ VIII Sem

4. Branch *

Mark only one oval.

⬭ CSE

5. Email ID *

_____

6. Is the course content met your expectation. *

Mark only one oval.

⬭ Yes

⬭ No

7. Is the lecture sequence well planned? *

Mark only one oval.

⬭ Yes

⬭ No

8. The contents of the course are explained with examples. *

Mark only one oval.

⬭ Agree

⬭ Moderate

⬭ strongly agree

9. Is the level of course high. *

Mark only one oval.

⬭ Agree

⬭ Moderate

⬭ strongly agree

10. Is the course exposed you to the new knowledge and practice. *

Mark only one oval.

◯ Agree

◯ Moderate

◯ strongly agree

11. Is the lecture clear and easy to understand? *

Mark only one oval.

◯ 1

◯ 2

◯ 3

◯ 4

◯ 5

12. Rate the value of the course increasing your skills. *

Mark only one oval.

◯ 1

◯ 2

◯ 3

◯ 4

◯ 5

Note: 1. Below average   2. Average   3. Good   4. Very Good   5. Excellent

13. Any Issues

_____

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Department of Computer Science & Engineering

Feedback form on AI & ML Concepts

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Email address	Name of the student	Year & Semester	Branch	Roll Num	Is the course content met your expectation	Is the lecture sequence well planned	The contents of the course is explained with examples	Is the level of course high	Is the course exposed you to the new knowledge and	Is the lecturer clear and easy to	Rate the value of course	Any issues
209y1a0502@ksrmce.ac.in	A.Sainath Reddy	IV SEM	CSE	209Y1A0502	Yes	Yes	Agree	Agree	Strongly agree	4	5	Nothing
209y1a0505@ksrmce.ac.in	A.gangadhar	IV SEM	CSE	209y1a0505	Yes	Yes	Agree	Agree	Strongly agree	5	5	Nothing
209y1a0536@ksrmce.ac.in	C.Manikanta	IV SEM	CSE	209Y1A0536	Yes	Yes	agree	Agree	Strongly agree	5	4	Good
209y1a0539@ksrmce.ac.in	C.Ranganayakulu	IV SEM	CSE	209Y1A0539	Yes	Yes	Agree	Agree	Strongly agree	4	5	Good
209y1a0541@ksrmce.ac.in	C,R Ravindra	IV SEM	CSE	209Y1A0541	Yes	Yes	Strongly agree	Agree	Strongly agree	4	3	Good
209y1a0542@ksrmce.ac.in	C jagadeesh Reddy	IV SEM	CSE	209y1a0542	Yes	Yes	Strongly agree	Agree	Strongly agree	5	4	nothing
209y1a0543@ksrmce.ac.in	D.Praveen	IV SEM	CSE	209Y1A0543	Yes	Yes	agree	Agree	Strongly agree	4	4	Good
209y1a0545@ksrmce.ac.in	Dandu Ajay	IV SEM	CSE	209Y1A0545	Yes	Yes	Agree	Agree	Strongly agree	5	5	nothing
209y1a0551@ksrmce.ac.in	D. Umar Farooq	IV SEM	CSE	209Y1A0551	Yes	Yes	Agree	Agree	Strongly agree	5	5	Good
209y1a0567@ksrmce.ac.in	G. Kavya	IV SEM	CSE	209Y1A0567	Yes	Yes	Agree	Agree	Strongly agree	4	5	very good
209y1a0568@ksrmce.ac.in	GURRAMKONDA UMARFAROOK	IV SEM	CSE	209y1a0568	Yes	Yes	Strongly agree	Agree	Strongly agree	4	3	Nothing
209y1a0574@ksrmce.ac.in	K.Prasanth	IV SEM	CSE	209Y1A0574	Yes	Yes	Strongly agree	Agree	Strongly agree	5	4	Good
209y1a0577@ksrmce.ac.in	K.Yaswanth	IV SEM	CSE	209y1a0577	Yes	Yes	Strongly agree	Agree	Strongly agree	5	4	nothing
209y1a05a2@ksrmce.ac.in	M.Shophiya	IV SEM	CSE	209Y1A05a2	Yes	Yes	Strongly agree	Agree	Strongly agree	5	4	nothing
209y1a05A5@ksrmce.ac.in	M.Aditya	IV SEM	CSE	209Y1A05A5	Yes	Yes	Strongly agree	Agree	Strongly agree	5	4	nothing
209y1a05b6@ksrmce.ac.in	P. BHOOMIKA	IV SEM	CSE	209Y1A05B6	Yes	Yes	agree	Agree	Strongly agree	4	4	no
209y1a05b9@ksrmce.ac.in	P.SAI KRISHNAREDDY	IV SEM	CSE	209Y1A05B9	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	Nothing
209y1a05d6@ksrmce.ac.in	Rachagalla Suvidha	IV SEM	CSE	209y1a05d6	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	Good
209y1a05e7@ksrmce.ac.in	Shaik.Afzal	IV SEM	CSE	209Y1A05E7	Yes	Yes	Agree	Agree	Strongly agree	5	4	Good
209y1a05f6@ksrmce.ac.in	Shaik.Rehanuma	IV SEM	CSE	209Y1A05F6	Yes	Yes	Strongly agree	Agree	Strongly agree		5	no
209y1a05g2@ksrmce.ac.in	S.Rishitha	IV SEM	CSE	209Y1A05G2	Yes	Yes	agree	Agree	Strongly agree	5	5	Good
209y1a05g3@ksrmce.ac.in	S RAVI KRISHNA	IV SEM	CSE	209y1a05g3	Yes	Yes	agree	Agree	Strongly agree	3	5	Good
209y1a05g4@ksrmce.ac.in	S.Mohammed Hussain	IV SEM	CSE	209Y1A05G4	Yes	Yes	agree	Agree	Strongly agree	5	4	very good
209y1a05g5@ksrmce.ac.in	Suru nagajyothi	IV SEM	CSE	209Y1A05G5	Yes	Yes	agree	Agree	Strongly agree	4	4	very good
209y1a05g7@ksrmce.ac.in	Syed Syed Ammaji	IV SEM	CSE	209Y1A05G7	Yes	Yes	agree	Agree	Strongly agree	5	4	very good
209y1a05h6@ksrmce.ac.in	V LAKSHMINARAYANA	IV SEM	CSE	209Y1A05H6	Yes	Yes	agree	Agree	Strongly agree	3	5	no
209y1a05h9@ksrmce.ac.in	Myna Veeramreddy	IV SEM	CSE	209Y1A05H9	Yes	Yes	agree	Agree	Strongly agree	4	5	nithing
209y1a05i3@ksrmce.ac.in	Prathyusha Vennapusa	IV SEM	CSE	209Y1A05I3	Yes	Yes	Strongly agree	Agree	Strongly agree	4	5	Good
209y1a05i8@ksrmce.ac.in	Y.Hameeda bhanu	IV SEM	CSE	209Y1A05I8	Yes	Yes	Strongly agree	Agree	Strongly agree	4	4	Good

219y5a0503@ksrmce.ac.in	Bathala Raja Rajeswari	IV SEM	CSE	219Y5A0503	Yes	Yes	agree	Agree	Strongly agree	5	5	Good
219y5a0520@ksrmce.ac.in	Y.PAVAN KUMAR REDDY	IV SEM	CSE	219y5a0520	Yes	Yes	agree	Agree	Strongly agree	5	5	no
209y1a05f2@ksrmce.ac.in	Shaik Naasar mohiddin	IV SEM	CSE	219y5a0521	Yes	Yes	Strongly agree	Agree	Strongly agree	3	4	no
219y5a0544@ksrmce.ac.in	D.Hegeswara	IV SEM	CSE	219Y5A0544	Yes	Yes	agree	Agree	Strongly agree	5	5	Nothing
219y5a0554@ksrmce.ac.in	G.Maheswara Reddy	IV SEM	CSE	219y5a0554	Yes	Yes	agree	Agree	Strongly agree	3	4	no

Coordinator

HOD

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003
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AWARD LIST

S.No	Roll Number	Name of the Student	Marks Obtained
1	209Y1A0502	A. Sainath Reddy	13
2	209Y1A0505	A. Gangadhar	18
3	209Y1A0536	C.Manikanta	17
4	209Y1A0539	C. Ranganayakulu	18
5	209Y1A0541	C. R Ravindra	14
6	209Y1A0542	C Jagadeesh Reddy	16
7	209Y1A0543	D.Praveen	15
8	209Y1A0545	D. Ajay	16
9	209Y1A0551	D. Umar Farooq	12
10	209Y1A0567	G. Kavya	15
11	209Y1A0568	Gurramkonda Umarfarook	15
12	209Y1A0574	K.Prasanth	18
13	209Y1A0577	K.Yaswanth	15
14	209Y1A05A2	M.Shophiya	17
15	209Y1A05A5	M.Aditya	17
16	209Y1A05B6	P. Bhoomika	16
17	209Y1A05B9	P. Saikrishna Reddy	17
18	209Y1A05D6	G.V.Kineeti	15
19	209Y1A05E7	Shaik.Afzal	14
20	209Y1A05F6	Shaik Rehanuma	14
21	209Y1A05G2	S. Rishitha	17
22	209Y1A05G3	S. Ravi Krishna	17
23	209Y1A05G4	S.Mohammed Hussain	16
24	209Y1A05G5	Suru Nagajyothi	17
25	209Y1A05G7	Syed Syed Ammaji	14
26	209Y1A05H6	V.Lakshminarayana	09
27	209Y1A05H9	Myna Veeramreddy	19
28	209Y1A05I3	Prathyusha Vennapusa	14
29	209Y1A05I8	Y.Hameeda Bhanu	15
30	219Y5A0503	B. Raja Rajeswari	10
31	219Y5A0520	Y. Pavan Kumar Reddy	16

X

Coordinator(s)

HoD CSE
Dr. V. LOKESWARA REDDY
M.Tech., Ph.D.,
Professor & HOD CSE
K.S.R.M. College of Engineering (Autonomous)
KADAPA - 516 005.

Roll Number: _____ Name of the Stud ent: _____

Time: 20 Min (Objective Questions) **Max.Marks:20**

Note: Answer the following Questions and each question carries **one** mark.

1. Who is the father of artificial intelligence?
(a)Fisher Ada (b) John McCarthy (c)Allen Newell (d)Alan Turning   [   ]

2. ind the requirement of a Control Strategy?
(a) Motion   (b) Iterative   [   ]
(c) Systematic   (d) a & c

3. _____ gives guarantee to find solution.   [   ]
(a) BFS   (b) DFS   (c) Best-First Search (d) All

4. Which of the following is the formal task?   [   ]
 (a) vision (b) Speech (c) Fault finding (d) Games

5. Which of the following is the Mundane task?   [   ]
 (a) vision (b) Theorem Proving (c) Fault finding (d) Games

6. Which of the following is not a AI technique?   [   ]
 (a)Inference (b) Sort (c) Use of knowledge (d) Search

7. Which of the following are not production system components?   [   ]
 (a) Rules (b) Knowledgebase / Database (c) Control Strategy (d) None

8. Which of the following is an example of Ignorable problem?   [   ]
 (a) 8 Puzzle Problem (b) Theorem proving (c) Chess (d)None

9. Which of the following is an example of irrecoverable problem?   [   ]
 (a) 8 Puzzle Problem (b) Theorem proving (c) Chess (d)None

10. Which of the following is an example of certain outcomes problem?   [   ]
    (a) 8 Puzzle Problem (b) Chess (c) water jug problem (d)all

11. PCA is_____   [   ]
    (a) backward feature selection   (b) forward feature selection
    (c) feature extraction   (d) None

12. Following are the types of supervised learning_____   [   ]
    (a) Regression (b) classification (C) subgroup discovery (d) All of above

13. The output of training process in machine learning is_____   [   ]
    (a) machine learning algorithm   (b) machine learning model
    (c) null   (d) accuracy

14. You are given reviews of few Netflix series marked as positive, negative and   [   ]
neutral. Classifying reviews of a new netflix series is an example of_____
    (a) unsupervised learning   (b) semi supervised learning
    (c)supervised learning   (d) reinforcement learning

15. ike the probabilistic view, the _____ view allows us to associate a   [   ]
probability of membership with each classification
    (a) deductive (b) exampler (c) classical (d) inductive

16. Database query is used to uncover this type of knowledge.   [   ]
    (a) Hidden   (b) shallow   (c) deep   (d) multidimensional

17. In simple term, machine learning is_____ .   [   ]
    (a) prediction to answer a query   (b) training based on historical data
    (c) All of above   (d) None of above

18. If machine learning model output doesn't involves target variable then that   [   ]
    model is called as_____
    (a) predictive model (b) descriptive model (c) reinforcement learning (d) None

19. In what type of learning labelled training data is used_____   [   ]
    (a) supervised learning   (b) unsupervised learning
    (c)reinforcement learning   (d) active learning

20. In the example of predicting number of babies based on stork's population,   [   ]
    Number of babies is_____
    (a) feature   (b) observation   (c) outcome   (d) attribute

13/20

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ASSESSMENT TEST

Roll Number: 20971a0502   Name of the Stud ent: A. Sainth Reddy

Time: 20 Min   **(Objective Questions)**   **Max.Marks:20**

Note: Answer the following Questions and each question carries **one** mark.

1. Who is the father of artificial intelligence?
(a)Fisher Ada (b) John McCarthy (c)Allen Newell (d)Alan Turning   [C] ✗

2. ind the requirement of a Control Strategy?
(a) Motion   (b) Iterative
(c) Systematic   (d) a & c   [b] ✗

3. _____ gives guarantee to find solution.
(a) BFS   (b) DFS   (c) Best-First Search (d) All   [d] ✓

4. Which of the following is the formal task?
(a) vision (b) Speech (c) Fault finding (d) Games   [d] ✓

5. Which of the following is the Mundane task?
(a) vision (b) Theorem Proving (c) Fault finding (d) Games   [c] ✗

6. Which of the following is not a AI technique?
(a)Inference (b) Sort (c) Use of knowledge (d) Search   [d] ✗

7. Which of the following are not production system components?
(a) Rules (b) Knowledgebase / Database (c) Control Strategy (d) None   [c] ✗

8. Which of the following is an example of Ignorable problem?
(a) 8 Puzzle Problem (b) Theorem proving (c) Chess (d)None   [b] ✓

9. Which of the following is an example of irrecoverable problem?
(a) 8 Puzzle Problem (b) Theorem proving (c) Chess (d)None   [c] ✓

10. Which of the following is an example of certain outcomes problem?
(a) 8 Puzzle Problem (b) Chess (c) water jug problem (d)all   [b] ✗

11. PCA is_____
(a) backward feature selection   (b) forward feature selection
(c) feature extraction   (d) None   [b] ✗

12. Following are the types of supervised learning_____ [d]
    (a) Regression (b) classification (C) subgroup discovery (d) All of above

13. The output of training process in machine learning is_____ [b]
    (a) machine learning algorithm (b) machine learning model
    (c) null   (d) accuracy

14. You are given reviews of few Netflix series marked as positive, negative and [c]
neutral. Classifying reviews of a new netflix series is an example of_____
    (a) unsupervised learning   (b) semi supervised learning
    (c)supervised learning   (d) reinforcement learning

15. ike the probabilistic view, the _____ view allows us to associate a [d]
probability of membership with each classification
    (a) deductive (b) exampler (c) classical (d) inductive

16. Database query is used to uncover this type of knowledge. [d]
    (a) Hidden (b) shallow (c) deep (d) multidimensional

17. In simple term, machine learning is_____ . [c]
    (a) prediction to answer a query   (b) training based on historical data
    (c) All of above   (d) None of above

18. If machine learning model output doesn't involves target variable then that [b]
    model is called as_____
    (a) predictive model (b) descriptive model (c) reinforcement learning (d) None

19. In what type of learning labelled training data is used_____ [a]
    (a) supervised learning   (b) unsupervised learning
    (c)reinforcement learning   (d) active learning

20. In the example of predicting number of babies based on stork's population, [c]
    Number of babies is_____
    (a) feature (b) observation (c) outcome (d) attribute

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ASSESSMENT TEST

Roll Number: 2094IA0520   Name of the Stud ent: Y. Pavan Kumar Reddy

Time: 20 Min   **(Objective Questions)**   **Max.Marks:20**

Note: Answer the following Questions and each question carries **one** mark.

1. Who is the father of artificial intelligence?
(a)Fisher Ada (b) John McCarthy (c)Allen Newell (d)Alan Turning   [A] ✗

2. ind the requirement of a Control Strategy?
(a) Motion   (b) Iterative
(c) Systematic   (d) a & c   [D] ✓

3. _____ gives guarantee to find solution.
(a) BFS   (b) DFS   (c) Best-First Search (d) All   [D] ✓

4. Which of the following is the formal task?
(a) vision (b) Speech (c) Fault finding (d) Games   [C] ✗

5. Which of the following is the Mundane task?
(a) vision (b) Theorem Proving (c) Fault finding (d) Games   [A] ✓

6. Which of the following is not a AI technique?
(a)Inference (b) Sort (c) Use of knowledge (d) Search   [B] ✓

7. Which of the following are not production system components?
(a) Rules (b) Knowledgebase / Database (c) Control Strategy (d) None   [D] ✓

8. Which of the following is an example of Ignorable problem?
(a) 8 Puzzle Problem (b) Theorem proving (c) Chess (d)None   [C] ✗

9. Which of the following is an example of irrecoverable problem?
(a) 8 Puzzle Problem (b) Theorem proving (c) Chess (d)None   [D] ✗

10. Which of the following is an example of certain outcomes problem?
(a) 8 Puzzle Problem (b) Chess (c) water jug problem (d)all   [A] ✓

11. PCA is_____
(a) backward feature selection   (b) forward feature selection
(c) feature extraction   (d) None   [C] ✓

12. Following are the types of supervised learning_____   [D]
    (a) Regression (b) classification (C) subgroup discovery (d) All of above

13. The output of training process in machine learning is_____   [B]
    (a) machine learning algorithm   (b) machine learning model
    (c) null   (d) accuracy

14. You are given reviews of few Netflix series marked as positive, negative and   [C]
neutral. Classifying reviews of a new netflix series is an example of_____
    (a) unsupervised learning   (b) semi supervised learning
    (c)supervised learning   (d) reinforcement learning

15. ike the probabilistic view, the _____ view allows us to associate a   [D]
probability of membership with each classification
    (a) deductive (b) exampler (c) classical (d) inductive

16. Database query is used to uncover this type of knowledge.   [D]
    (a) Hidden   (b) shallow   (c) deep   (d) multidimensional

17. In simple term, machine learning is_____ .   [C]
    (a) prediction to answer a query   (b) training based on historical data
    (c) All of above   (d) None of above

18. If machine learning model output doesn't involves target variable then that   [B]
    model is called as_____
    (a) predictive model (b) descriptive model (c) reinforcement learning (d) None

19. In what type of learning labelled training data is used_____   [A]
    (a) supervised learning   (b) unsupervised learning
    (c)reinforcement learning   (d) active learning

20. In the example of predicting number of babies based on stork's population,   [C]
    Number of babies is_____
    (a) feature   (b) observation   (c) outcome   (d) attribute

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ASSESSMENT TEST

Roll Number: 209Y1A0 5A2   Name of the Stud ent: M. Sophiya

Time: 20 Min   (Objective Questions)   Max.Marks:20

Note: Answer the following Questions and each question carries **one** mark.

1. Who is the father of artificial intelligence?   [c] ✗
(a)Fisher Ada (b) John McCarthy (c)Allen Newell (d)Alan Turning

2. ind the requirement of a Control Strategy?   [b] ✗
(a) Motion   (b) Iterative
(c) Systematic   (d) a & c

3. _____ gives guarantee to find solution.   [a] ✗
(a) BFS   (b) DFS   (c) Best-First Search (d) All

4. Which of the following is the formal task?   [d] ✓
 (a) vision (b) Speech (c) Fault finding (d) Games

5. Which of the following is the Mundane task?   [a] ✓
 (a) vision (b) Theorem Proving (c) Fault finding (d) Games

6. Which of the following is not a AI technique?   [b] ✓
 (a)Inference (b) Sort (c) Use of knowledge (d) Search

7. Which of the following are not production system components?   [d] ✓
 (a) Rules (b) Knowledgebase / Database (c) Control Strategy (d) None

8. Which of the following is an example of Ignorable problem?   [b] ✓
(a) 8 Puzzle Problem (b) Theorem proving (c) Chess (d)None

9. Which of the following is an example of irrecoverable problem?   [c] ✓
(a) 8 Puzzle Problem (b) Theorem proving (c) Chess (d)None

10. Which of the following is an example of certain outcomes problem? [d] ✓
    (a) 8 Puzzle Problem (b) Chess (c) water jug problem (d)all

11. PCA is_____   [c] ✓
    (a) backward feature selection   (b) forward feature selection
    (c) feature extraction   (d) None

12. Following are the types of supervised learning_____   [d]
    (a) Regression (b) classification (C) subgroup discovery (d) All of above

13. The output of training process in machine learning is_____   [B]
    (a) machine learning algorithm   (b) machine learning model
    (c) null   (d) accuracy

14. You are given reviews of few Netflix series marked as positive, negative and   [c]
    neutral. Classifying reviews of a new netflix series is an example of_____
    (a) unsupervised learning   (b) semi supervised learning
    (c)supervised learning   (d) reinforcement learning

15. ike the probabilistic view, the _____ view allows us to associate a   [d]
    probability of membership with each classification
    (a) deductive (b) exampler (c) classical (d) inductive

16. Database query is used to uncover this type of knowledge.   [d]
    (a) Hidden   (b) shallow (c) deep (d) multidimensional

17. In simple term, machine learning is_____ .   [c]
    (a) prediction to answer a query   (b) training based on historical data
    (c) All of above   (d) None of above

18. If machine learning model output doesn't involves target variable then that   [b]
    model is called as_____
    (a) predictive model (b) descriptive model (c) reinforcement learning (d) None

19. In what type of learning labelled training data is used_____   [a]
    (a) supervised learning   (b) unsupervised learning
    (c)reinforcement learning   (d) active learning

20. In the example of predicting number of babies based on stork's population,   [c]
    Number of babies is_____
    (a) feature   (b) observation   (c) outcome   (d) attribute

14/20 x

Roll Number: 209V/A05E7   Name of the Stud ent: S. Afzol

Time: 20 Min   (Objective Questions)   Max.Marks:20
Note: Answer the following Questions and each question carries **one** mark.

1. Who is the father of artificial intelligence?
(a)Fisher Ada (b) John McCarthy (c)Allen Newell (d)Alan Turning   [A] X

2. ind the requirement of a Control Strategy?
(a) Motion   (b) Iterative
(c) Systematic   (d) a & c   [B] X

3. _____ gives guarantee to find solution.
(a) BFS   (b) DFS   (c) Best-First Search (d) All   [C] X

4. Which of the following is the formal task?
(a) vision (b) Speech (c) Fault finding (d) Games   [D] ✓

5. Which of the following is the Mundane task?
(a) vision (b) Theorem Proving (c) Fault finding (d) Games   [A] ✓

6. Which of the following is not a AI technique?
(a)Inference (b) Sort (c) Use of knowledge (d) Search   [B] ✓

7. Which of the following are not production system components?
(a) Rules (b) Knowledgebase / Database (c) Control Strategy (d) None [C] X

8. Which of the following is an example of Ignorable problem?
(a) 8 Puzzle Problem (b) Theorem proving (c) Chess (d)None   [A] X

9. Which of the following is an example of irrecoverable problem?
(a) 8 Puzzle Problem (b) Theorem proving (c) Chess (d)None   [C] X

10. Which of the following is an example of certain outcomes problem?
(a) 8 Puzzle Problem (b) Chess (c) water jug problem (d)all   [C] X

11. PCA is_____
(a) backward feature selection   (b) forward feature selection
(c) feature extraction   (d) None   [C] ✓

12. Following are the types of supervised learning_____ [d]
    (a) Regression (b) classification (C) subgroup discovery (d) All of above

13. The output of training process in machine learning is_____ [b]
    (a) machine learning algorithm   (b) machine learning model
    (c) null   (d) accuracy

14. You are given reviews of few Netflix series marked as positive, negative and [c]
neutral. Classifying reviews of a new netflix series is an example of_____
    (a) unsupervised learning   (b) semi supervised learning
    (c)supervised learning   (d) reinforcement learning

15. ike the probabilistic view, the _____ view allows us to associate a [d]
probability of membership with each classification
    (a) deductive (b) exampler (c) classical (d) inductive

16. Database query is used to uncover this type of knowledge. [d]
    (a) Hidden   (b) shallow   (c) deep   (d) multidimensional

17. In simple term, machine learning is_____ . [c]
    (a) prediction to answer a query   (b) training based on historical data
    (c) All of above   (d) None of above

18. If machine learning model output doesn't involves target variable then that [b]
    model is called as_____
    (a) predictive model (b) descriptive model (c) reinforcement learning (d) None

19. In what type of learning labelled training data is used_____ [a]
    (a) supervised learning   (b) unsupervised learning
    (c)reinforcement learning   (d) active learning

20. In the example of predicting number of babies based on stork's population, [c]
    Number of babies is_____
    (a) feature   (b) observation   (c) outcome   (d) attribute

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ASSESSMENT TEST

Roll Number: 2094/A05H9   Name of the Stud ent: M. Veeramreddy

Time: 20 Min   **(Objective Questions)**   **Max.Marks:20**

Note: Answer the following Questions and each question carries **one** mark.

1. Who is the father of artificial intelligence?
(a)Fisher Ada (b) John McCarthy (c)Allen Newell (d)Alan Turning   [B] X

2. ind the requirement of a Control Strategy?
(a) Motion   (b) Iterative
(c) Systematic   (d) a & c   [D] ✓

3. _____ gives guarantee to find solution.
(a) BFS (b) DFS (c) Best-First Search (d) All   [D] ✓

4. Which of the following is the formal task?
(a) vision (b) Speech (c) Fault finding (d) Games   [D] ✓

5. Which of the following is the Mundane task?
(a) vision (b) Theorem Proving (c) Fault finding (d) Games   [C] ✓

6. Which of the following is not a AI technique?
(a)Inference (b) Sort (c) Use of knowledge (d) Search   [B] ✓

7. Which of the following are not production system components?
(a) Rules (b) Knowledgebase / Database (c) Control Strategy (d) None   [D] ✓

8. Which of the following is an example of Ignorable problem?
(a) 8 Puzzle Problem (b) Theorem proving (c) Chess (d)None   [B] ✓

9. Which of the following is an example of irrecoverable problem?
(a) 8 Puzzle Problem (b) Theorem proving (c) Chess (d)None   [C] ✓

10. Which of the following is an example of certain outcomes problem?
(a) 8 Puzzle Problem (b) Chess (c) water jug problem (d)all   [A] ✓

11. PCA is_____
(a) backward feature selection   (b) forward feature selection
(c) feature extraction   (d) None   [C] ✓

12. Following are the types of supervised learning_____
    (a) Regression (b) classification (C) subgroup discovery (d) All of above   [D]

13. The output of training process in machine learning is_____
    (a) machine learning algorithm   (b) machine learning model
    (c) null   (d) accuracy   [B]

14. You are given reviews of few Netflix series marked as positive, negative and
neutral. Classifying reviews of a new netflix series is an example of_____   [C]
    (a) unsupervised learning   (b) semi supervised learning
    (c)supervised learning   (d) reinforcement learning

15. ike the probabilistic view, the _____ view allows us to associate a
probability of membership with each classification   [D]
    (a) deductive (b) exampler (c) classical (d) inductive

16. Database query is used to uncover this type of knowledge.
    (a) Hidden   (b) shallow   (c) deep   (d) multidimensional   [P]

17. In simple term, machine learning is_____ .
    (a) prediction to answer a query   (b) training based on historical data   [C]
    (c) All of above   (d) None of above

18. If machine learning model output doesn't involves target variable then that
      model is called as_____   [B]
    (a) predictive model (b) descriptive model (c) reinforcement learning (d) None

19. In what type of learning labelled training data is used_____
    (a) supervised learning   (b) unsupervised learning   [A]
    (c)reinforcement learning   (d) active learning

20. In the example of predicting number of babies based on stork's population,
    Number of babies is_____   [C]
    (a) feature   (b) observation   (c) outcome   (d) attribute

Lecture Slides for

INTRODUCTION TO

Machine Learning
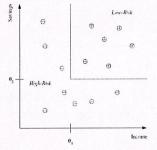
CHAPTER 1:

Introduction

Why "Learn" ?

- Machine learning is programming computers to optimize a performance criterion using example data or past experience.
- There is no need to "learn" to calculate payroll
- Learning is used when:
  - Human expertise does not exist (navigating on Mars),
  - Humans are unable to explain their expertise (speech recognition)
  - Solution changes in time (routing on a computer network)
  - Solution needs to be adapted to particular cases (user biometrics)

What We Talk About When We Talk About "Learning"

- Learning general models from a data of particular examples
- Data is cheap and abundant (data warehouses, data marts); knowledge is expensive and scarce.
- Example in retail: Customer transactions to consumer behavior:
  People who bought "Da Vinci Code" also bought "The Five People You Meet in Heaven" (www.amazon.com)
- Build a model that is *a good and useful approximation* to the data.

Data Mining

- Retail: Market basket analysis, Customer relationship management (CRM)
- Finance: Credit scoring, fraud detection
- Manufacturing: Optimization, troubleshooting
- Medicine: Medical diagnosis
- Telecommunications: Quality of service optimization
- Bioinformatics: Motifs, alignment
- Web mining: Search engines
- ...

What is Machine Learning?

- Optimize a performance criterion using example data or past experience.
- Role of Statistics: Inference from a sample
- Role of Computer science: Efficient algorithms to
  - Solve the optimization problem
  - Representing and evaluating the model for inference

Applications

- Association
- Supervised Learning
  - Classification
  - Regression
- Unsupervised Learning
- Reinforcement Learning

Learning Associations

- Basket analysis:
  $P(Y|X)$ probability that somebody who buys X also buys Y where X and Y are products/services.

  Example: $P(\text{chips} \mid \text{beer}) = 0.7$

Classification

- Example: Credit scoring
- Differentiating between low-risk and high-risk customers from their *income* and *savings*

Discriminant: IF *income* > θ_1 AND *savings* > θ_2
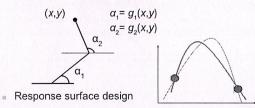THEN low-risk ELSE high-risk

Classification: Applications

- Aka Pattern recognition
- Face recognition: Pose, lighting, occlusion (glasses, beard), make-up, hair style
- Character recognition: Different handwriting styles.
- Speech recognition: Temporal dependency.
  - Use of a dictionary or the syntax of the language.
  - Sensor fusion: Combine multiple modalities; eg, visual (lip image) and acoustic for speech
- Medical diagnosis: From symptoms to illnesses
- ...

Face Recognition

Training examples of a person

Test images
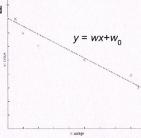
Regression

- Example: Price of a used car
- x : car attributes
  y : price
  $y = g(x \mid \theta)$
  $g(\ )$ model,
  θ parameters

$$y = wx + w_0$$

Regression Applications

- Navigating a car: Angle of the steering wheel (CMU NavLab)
- Kinematics of a robot arm

(x,y) $\alpha_1 = g_1(x,y)$
$\alpha_2 = g_2(x,y)$

- Response surface design

Supervised Learning: Uses

- Prediction of future cases: Use the rule to predict the output for future inputs
- Knowledge extraction: The rule is easy to understand
- Compression: The rule is simpler than the data it explains
- Outlier detection: Exceptions that are not covered by the rule, e.g., fraud

Unsupervised Learning

- Learning "what normally happens"
- No output
- Clustering: Grouping similar instances
- Example applications
  - Customer segmentation in CRM
  - Image compression: Color quantization
  - Bioinformatics: Learning motifs

Reinforcement Learning

- Learning a policy: A sequence of outputs
- No supervised output but delayed reward
- Credit assignment problem
- Game playing
- Robot in a maze
- Multiple agents, partial observability, ...

Resources: Datasets

- UCI Repository:
  http://www.ics.uci.edu/~mlearn/MLRepository.html
- UCI KDD Archive:
  http://kdd.ics.uci.edu/summary.data.application.html
- Statlib: http://lib.stat.cmu.edu/
- Delve: http://www.cs.utoronto.ca/~delve/

Resources: Journals

- Journal of Machine Learning Research www.jmlr.org
- Machine Learning
- Neural Computation
- Neural Networks
- IEEE Transactions on Neural Networks
- IEEE Transactions on Pattern Analysis and Machine Intelligence
- Annals of Statistics
- Journal of the American Statistical Association
- ...

Lecture Slides for

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