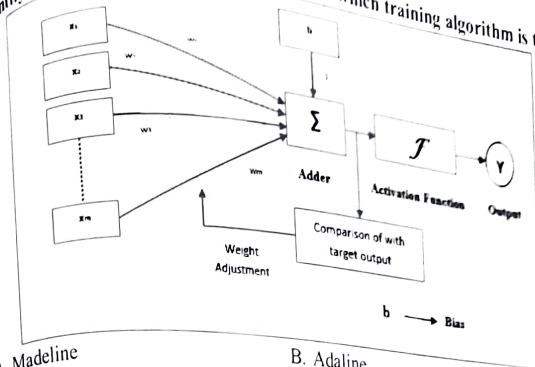


418. Which of the following is true about the backpropagation algorithm?
- It is a supervised learning algorithm
 - It is an unsupervised learning algorithm
 - It is a reinforcement learning algorithm
 - It is a semi-supervised learning algorithm
419. The backpropagation algorithm involves two phases. What are they?
- Forward propagation and backward propagation
 - Feature selection and feature extraction
 - Clustering and classification
 - Regression and classification
420. Which of the following is the activation function commonly used in the backpropagation algorithm?
- Linear
 - Sigmoid
 - ReLU
 - Tanh
421. The backpropagation law is also known as generalized delta rule, is it true?
- Yes
 - No
 - Partially yes
 - Not sure
422. _____ consists of a set of neurons where each neuron corresponds to a pixel of the difference image and is connected to all the neurons in the neighborhood.
- Hopfield neural network
 - Biological neural network
 - Hamming neural network
 - McColloch Pits neural network

423. The _____ is commonly used for auto-association and optimization tasks.
- Hopfield neural network
 - Biological neural network
 - Hamming neural network
 - McColloch Pits neural network
424. In _____, the input and output patterns are discrete vector, which can be either binary 0,1 or bipolar +1, -1 in nature.
- Continuous Hopfield n/w
 - Discrete Hopfield n/w
 - Sequential Hopfield n/w
 - None of above
425. Continuous Hopfield Network in comparison with Discrete Hopfield network, continuous network has _____ as a continuous variable.
- Space
 - Range
 - Time
 - Velocity
426. _____ architecture can be build up by adding electrical components such as amplifiers which can map the input voltage to the output voltage over a sigmoid activation function.
- Continuous Hopfield n/w
 - Discrete Hopfield n/w
 - Sequential Hopfield n/w
 - None of above
427. _____ is a network having a single linear unit.
- Madeline
 - Adaline
 - Backpropagation
 - Perceptron
428. The basic structure of _____ is similar to perceptron having an extra feedback loop.
- Madeline
 - Adaline
 - Backpropagation
 - None of above

Identify the diagram and answer the question which training algorithm is this?



- Madeline
 - Perceptron
430. _____ is a network which consists of many Adalines in parallel.
- Madeline
 - Adaline
 - Perceptron
 - Backpropagation
431. In NN, Delta rule works only for the _____
- Hidden layer
 - Input layer
- Adaline
 - Backpropagation
 - Weight and bias
 - Output layer
432. Generalized delta rule, also called as _____ rule, is a way of creating the desired values of the hidden layer.
- Feed-forward
 - Backpropagation
 - Perceptron
 - Adaline

ANSWER SHEET

1.D	2.D	3.D	4.A	5.C	6.B	7.B	8.C	9.D	10.D
11.B	12.D	13.C	14.D	15.A	16.D	17.D	18.A	19.B	20.D
21.B	22.D	23.D	24.D	25.A	26.B	27.D	28.D	29.B	30.C
31.B	32.A	33.D	34.C	35.C	36.B	37.D	38.A	39.B	40.C
41.A	42.D	43.D	44.C	45.C	46.B	47.C	48.B	49.A	50.A
51.A	52.C	53.A	54.B	55.A	56.C	57.A	58.A	59.A	60.B
61.A	62.A	63.B	64.B	65.D	66.B	67.C	68.A	69.B	70.B
71.A	72.D	73.C	74.B	75.D	76.B	77.B	78.B	79.E	80.B
81.A	82.A	83.B	84.B	85.B	86.B	87.B	88.D	89.B	90.D
91.B	92.C	93.D	94.A	95.D	96.A	97.A	98.B	99.A	100.A
101.B	102.A	103.B	104.B	105.C	106.A	107.A	108.A	109.A	110.A

111.A	112.A	113.A	114.B	115.B	116.B	117.A	118.A	119.B	120.A
121.B	122.A	123.B	124.A	125.C	126.C	127.A	128.B	129.A	130.D
131.A	132.C	133.D	134.C	135.C	136.A	137.D	138.C	139.D	140.A
141.C	142.B	143.B	144.A	145.B	146.B	147.A	148.B	149.A	150.C
151.D	152.D	153.B	154.B	155.B	156.B	157.B	158.C	159.B	160.B
161.B	162.B	163.A	164.A	165.A	166.A	167.B	168.C	169.C	170.B
171.C	172.B	173.D	174.A	175.A	176.B	177.A	178.D	179.A	180.B
181.C	182.C	183.D	184.B	185.D	186.D	187.B	188.B	189.A	190.D
191.A	192.A	193.D	194.E	195.A	196.C	197.B	198.D	199.B	200.D
201.B	202.C	203.B	204.A	205.B	206.C	207.C	208.C	209.A	210.B
211.B	212.D	213.B	214.D	215.B	216.C	217.A	218.C	219.E	220.C
221.A	222.B	223.B	224.A	225.B	226.C	227.B	228.D	229.B	230.A
231.A	232.C	233.A	234.B	235.C	236.D	237.C	238.C	239.D	240.B
241.B	242.B	243.B	244.D	245.B	246.C	247.D	248.A	249.A	250.B
251.A	252.A	253.B	254.A	255.D	256.B	257.B	258.D	259.A	260.B
261.A	262.A	263.D	264.A	265.B	266.B	267.B	268.D	269.E	270.A
271.B	272.B	273.B	274.B	275.D	276.D	277.B	278.B	279.B	280.A
281.C	282.B	283.A	284.C	285.C	286.D	287.A	288.B	289.A	290.B
291.B	292.B	293.D	294.D	295.D	296.C	297.A	298.A	299.A	300.D
301.C	302.C	303.D	304.D	305.D	306.D	307.D	308.A	309.B	310.B
311.B	312.B	313.C	314.A	315.A	316.A	317.A	318.C	319.A	320.B
321.D	322.A	323.C	324.A	325.B	326.C	327.A	328.C	329.A	330.C
331.A	332.B	333.A	334.A	335.B	336.B	337.A	338.C	339.D	340.C
341.C	342.C	343.C	344.D	345.C	346.D	347.B	348.A	349.C	350.B
351.C	352.B	353.D	354.B	355.D	356.A	357.A	358.D	359.C	360.B
361.B	362.A	363.D	364.D	365.B	366.D	367.A	368.D	369.A	370.B
371.A	372.C	373.A	374.B	375.A	376.B	377.D	378.C	379.D	380.A
381.C	382.B	383.D	384.A	385.A	386.B	387.B	388.B	389.A	390.B
391.A	392.C	393.A	394.B	395.B	396.D	397.B	398.A	399.C	400.B
401.A	402.A	403.A	404.D	405.B	406.C	407.C	408.D	409.A	410.B
411.A	412.B	413.A	414.D	415.A	416.D	417.B	418.A	419.A	420.B
421.A	422.A	423.A	424.B	425.C	426.A	427.B	428.B	429.B	430.A
431.D	432.B								

REFERENCES

1. D. Thegrey, "AI Problems," *Medium*, Jun. 30, 2020. <https://medium.com/@dpthegrey/ai-problems-a3a829c46e9e>
2. "10 Most Common Myths About AI," Spiceworks. <https://www.spiceworks.com/tech/artificial-intelligence/articles/common-myths-about-ai/>
3. S. Russel and P. Norvig, *Artificial Intelligence : A Modern approach.*, 4th ed. Prentice Hall, 2018.
4. S. Russel and P. Norvig, *Artificial Intelligence : A Modern approach.*, 4th ed. Prentice Hall, 2018.
5. "Artificial Intelligence", Basanta Joshi, PhD, Asst. Prof., Depart. of Electronics and Computer Engineering, IOE
6. "Artificial Intelligence", Roshan Koju PhD, Visiting Lecturer at NCIT
7. E. Rich and K. Knight, *Artificial Intelligence*. McGraw-Hill Science, Engineering & Mathematics, 1991.
8. E. Rich and K. Knight, *Artificial Intelligence*. McGraw-Hill Science, Engineering & Mathematics, 1991.
9. "AI Techniques of Knowledge Representation - Javatpoint," www.javatpoint.com 2011. <https://www.javatpoint.com/ai-techniques-of-knowledge-representation>
10. K. H. Rosen, *Discrete mathematics and its applications*. New York, Ny McGraw-Hill Education, 2019.
11. DigiGurukul, "Artificial Intelligence Notes Unit 2," Jan. 29, 2018. <https://www.slideshare.net/DigiGurukulBlog/artificial-intelligence-notes-unit-2>
12. Learnbay Datascience, "Applications of expert system," Dec. 31, 2021. <https://www.slideshare.net/RachitVerma25/applications-of-expert-system> (accessed Feb. 22, 2023).
13. M. Gauri Rima, "Natural Language Processing (NLP) - ppt download," slideplayer.com. <https://slideplayer.com/slide/14070514/> (accessed Feb. 22, 2023).
14. "Artificial Intelligence", Basanta Joshi, PhD, Asst. Prof., Depart. of Electronics and Computer Engineering, IOE
15. "AI - Natural Language Processing - Tutorialspoint," Tutorialspoint.com. https://www.tutorialspoint.com/artificial_intelligence/artificial_intelligence_language_processing.htm
16. E. Rich and K. Knight, *Artificial Intelligence*. McGraw-Hill Science, Engineering & Mathematics, 1991.