A screenshot of a document

Description automatically generated

A green check mark on a white background

Description automatically generated

**Correction attempt made**

A screenshot of a computer error message

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A white rectangular object with black text

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A green check mark on a white background

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**Correction attempt made**

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Embedded file printout 10_607_Homework_7___Latex_Template_5.pdf Machine generated alternative text:
Homework 7 : Optimization and Search 
10-607 
3. (3 points) Plot the curve for train logistic loss versus train epoch for each of the three optimizers in a 
single plot. Include a legend indicating which curve corresponds to which optimizer. 
Plot 
4. (3 points) Plot the curve train accuracy versus train epoch for each of the three optimi•ærs in a single 
plot. Include a legend indicating which curve corresponds to which optimizer. 
Plot 
5. (1 point) What is the accuracy obtained by the gradient descent optimizer on the test data? 
Solution 
6. (l point) What is the accuracy obtained by the stochastic gradient descent optimizer on the test data? 
Solution 
50f8 


Embedded file printout 10_607_Homework_7___Latex_Template_5.pdf Machine generated alternative text:
Homework 7 : Optimization and Search 
10-607 
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Solution 
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Solution 
50f8 


Embedded file printout 10_607_Homework_7___Latex_Template_6.pdf Machine generated alternative text:
Homework 7 : Optimization and Search 
7. (l point) What is the accuracy obtained by the Adagrad optimizer on the test data? 
Solution 
60f8 
10-607 
Ink Drawings
Ink Drawings
Ink Drawings
Ink Drawings
Ink Drawings
Ink Drawings


Embedded file printout 10_607_Homework_7___Latex_Template_6.pdf Machine generated alternative text:
Homework 7 : Optimization and Search 
7. (l point) What is the accuracy obtained by the Adagrad optimizer on the test data? 
Solution 
60f8 
10-607 


Embedded file printout 10_607_Homework_7___Latex_Template_3.pdf Machine generated alternative text:
Homework 7 : Optimization and Search 
1 Search (5 points) 
10-607 
For each statement, state which search algorithm it applies to. Multiple choices may be selected. 
l. (l point) 
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[3 
2. (1 point) 
[3 
3. (l point) 
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4. (1 point) 
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5. (l point) 
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[3 
[3 
Commonly used to decode a vector during machine translation 
Beam Search 
A* Search 
Greedy Search 
None of the above 
Requires use of heuristics in its algorithm 
Beam Search 
A* Search 
Greedy Search 
None Of the above 
Involves using BFS to build a search tree 
Beam Search 
A* Search 
Greedy Search 
None of the above 
Guaranteed to find shortest path on a weighted graph regardless of the heuristic used 
Beam Search 
A* Search 
Greedy Search 
None Of the above 
Guaranteed to find shortest path on a weighted graph given an admissible and consistent 
Beam Search 
A* Search 
Greedy Search 
None of the above 
30f8 
Ink Drawings
Ink Drawings
Ink Drawings
Ink Drawings
Ink Drawings
Ink Drawings
Could be this Beam search… I guess but we'll go with none of the above
Extra Credit? 0-0"


Embedded file printout 10_607_Homework_7___Latex_Template_3.pdf Machine generated alternative text:
Homework 7 : Optimization and Search 
1 Search (5 points) 
10-607 
For each statement, state which search algorithm it applies to. Multiple choices may be selected. 
l. (l point) 
[3 
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2. (1 point) 
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3. (l point) 
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4. (1 point) 
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5. (l point) 
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Commonly used to decode a vector during machine translation 
Beam Search 
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Greedy Search 
None of the above 
Requires use of heuristics in its algorithm 
Beam Search 
A* Search 
Greedy Search 
None Of the above 
Involves using BFS to build a search tree 
Beam Search 
A* Search 
Greedy Search 
None of the above 
Guaranteed to find shortest path on a weighted graph regardless of the heuristic used 
Beam Search 
A* Search 
Greedy Search 
None Of the above 
Guaranteed to find shortest path on a weighted graph given an admissible and consistent 
Beam Search 
A* Search 
Greedy Search 
None of the above 
30f8 
