Homework 05 – Algorithms

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0 Outline

1 Logistics

Assigned:	Mon Feb 11, 2019
Due:	Mon Feb 18, 2019
Format:	PDF uploaded to eLearning

2 Reading

1. Read: Algorithms
   https://github.com/arthurredfern/UT-Dallas-CS-6301-CNNs/blob/master/Lectures/xNNs_05_Algorithms.pdf

3 Theory

2. 3x3/2 max pooling applied to an input feature map of size 3 x (2n + 1) generates an output feature map of size 1 x n. What is the minimum number of comparisons required to generate the output feature map? Draw a picture showing your pattern of comparisons (hand drawing is ok).

3. 3x3/2 max pooling applied to an input feature map of size (2m + 1) x (2n + 1) generates an output feature map of size m x n. What is the minimum number of comparisons required to generate the output feature map? Draw a picture showing your pattern of comparisons (hand drawing is ok).

4 Practice

None