

NETWORKS AND COMPLEXITY

Solution 3-11

*This is an example solution from the forthcoming book *Networks and Complexity*.*

Find more exercises at <https://github.com/NC-Book/NCB>

Ex 3.11: The best bridgewalk [5]

Formulate an efficient algorithm that finds the shortest eulerian circuit in a given network. (Of course every eulerian circuit will involve all bridges, but in a real city different eulerian circuits may cover very different distances while walking from one bridge to the next.)

Solution

In contrast to most unsolved problems, this one is not very famous. This means the chances are higher that there is an elegant solution. A good way to start is probably to define a distance matrix for the each node that describes the distances between bridges in the respective node.