

CSUS, College of Engineering and Computer Science  
Department of Computer Science  
CSC 138 – Computer Networking Fundamentals

### **Problem Solving Assignment**

Transport Layer – TCP Mux and Demux  
Network Layer – Dijkstra's Link State Algorithm – Advanced  
Link Layer – Learning Switches – Advanced

**Goal:** This assignment will help you enhance your understanding of the corresponding transport layer, network layer and link layer concepts.

**Attention:** Plagiarism is absolutely **NOT** allowed!

**Instructions:**

Please go to this URL: [https://gaia.cs.umass.edu/kurose\\_ross/interactive/index.php](https://gaia.cs.umass.edu/kurose_ross/interactive/index.php) to do the following interactive assignment. When you get your answer correct, please take a screenshot and put them in the report. No explanation is needed.

[https://gaia.cs.umass.edu/kurose\\_ross/interactive/TCP\\_Mux\\_Demux.php](https://gaia.cs.umass.edu/kurose_ross/interactive/TCP_Mux_Demux.php)

[https://gaia.cs.umass.edu/kurose\\_ross/interactive/dij\\_advanced.php](https://gaia.cs.umass.edu/kurose_ross/interactive/dij_advanced.php)

[https://gaia.cs.umass.edu/kurose\\_ross/interactive/learning\\_switch.php](https://gaia.cs.umass.edu/kurose_ross/interactive/learning_switch.php)

**Deliverable:** A lab report, with an **electronic submission** to Canvas, is expected to include your **screenshots** that can help you demonstrate your work. Otherwise, penalty will be given in grading.