**EECE.7290 Special Topics on SDN and Data Plane Programming**

**Lab2-TX**

**Introduction:**

In lab2-RX we learned how to receive the packets. In this lab2-TX, we are going to learn how to send packets, since in some applications we need to forward the packet out after the packet is processed.

**Tasks:**

1. Read the main.c source file and grasp the big picture of DPDK APIs.

2. Know to how to modify the main.c so that it does the job as we wish.

**Submissions:**

A single report which includes the following

1. A snapshot of the screen after you successfully start the application. How to compile and run the code can be found in the README file.

2. Summarize the main.c, write down all the important DPDK APIs used in the main.c in time-sequential order.

3. The current main.c can generate and send random UDP (with correct checksums) packets. Modify the main.c so that it only generates TCP (with correct checksums) packets with given source IP address 10.0.0.1 and destination IP address 10.0.0.2. You can still keep other header fields random. Attach only your added/modified code in the report and explain.