

**EE 5390 Selected Areas in Communication Networks**  
**Assignment 3**  
**Due: February 28, 2022**

1. Download and print the article “*The Road to SDN: An Intellectual History of Programmable Networks*” by Feamster et al. Place this article in your 3-ring binder.
2. Download and print the article “*Software-Defined Networking: A Comprehensive Survey*” by Kreutz et al. Place this article in your 3-ring binder.
3. Read the articles referenced in 1 and 2.
4. Capture flow data with pmacct to a CSV file. Write a python script that loads the flow data into a PANDAS dataframe. Create a new dataframe that is a subset of the original data frame using PANDAS to isolate the TCP flows where the number of flow bytes exceeds 100. Submit this python script through Blackboard named lastname\_3a.py.
5. Add four columns to your original PANDAS dataframe from 4) called ‘src\_as’, ‘src\_org’, ‘dst\_as’, ‘dst\_org’ using the data in the ‘as.csv’ file. Submit your Python script through Blackboard named lastname\_3b.py.