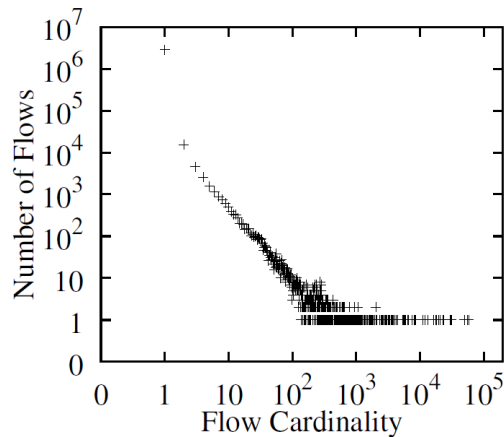# CNT6930/4930

Project

The project is to implement the following algorithms and data structures for traffic measurement: Probabilistic Counting, Virtual Bitmap Algorithms, FM Sketch, HyperLogLog Sketch, and Virtual HyperLogLog. Testing of the algorithms will be performed on real Internet traffic. The project can be done individually or in a team of two students. An undergraduate project (individual or team) implements two of the above five algorithms. A graduate (individual or team) project implements three of the above five; a graduate team project must implement one of the two virtual algorithms, which are harder.

For testing network traffic, you may download traffic traces from CAIDA (Cooperative Association for Internet Data Analysis) at http://www.caida.org/data/overview/

Or you may generate artificial traffic from the distribution

$$y = 3 \cdot 10^4 \cdot x^{-1.7}$$