



# Lecture 3: Digital Building Blocks



**Xufeng Kou**  
**School of Information Science and  
Technology**  
**ShanghaiTech University**



# Problems

**Problem 1: Write the SOP form of a 3-bit magnitude comparator (A>B case) and draw the circuit**

**Problem 2: Implement the following function using PLA.**

$$X = A\bar{B} + B\bar{C}D + \bar{A}B$$