Report 7

- 学习GAN+CLSTM的代码逻辑(按照计划)

    - Generator

        - generator fake sample
        - Pretrain network(clstm)

    - Discriminator

        - dense层
        - dropout层

- 代码实践

    - 尝试运行gan(使用改正过后的dataloader，不加上clstm)

    ```
    1
    2019-11-30T12:19:43.700031: step: 1580, loss: 0.166821, accuracy: 0.956055, precision: 0.555556, recall: 0.0549451, f1: 0.1
    2019-11-30T12:19:43.734512: step: 1581, loss: 0.148503, accuracy: 0.961426, precision: 0.833333, recall: 0.060241, f1: 0.11
    236
    2019-11-30T12:19:43.767861: step: 1582, loss: 0.170051, accuracy: 0.952637, precision: 1, recall: 0.0490196, f1: 0.0934579
    2019-11-30T12:19:43.802253: step: 1583, loss: 0.18929, accuracy: 0.948242, precision: 0.8, recall: 0.0366972, f1: 0.0701754
    2019-11-30T12:19:43.835194: step: 1584, loss: 0.173704, accuracy: 0.952148, precision: 0.454545, recall: 0.0515464, f1: 0.0
    925926
    2019-11-30T12:19:43.869882: step: 1585, loss: 0.16822, accuracy: 0.954102, precision: 0.6, recall: 0.0625, f1: 0.113208
    2019-11-30T12:19:43.903363: step: 1586, loss: 0.154147, accuracy: 0.959473, precision: 0.555556, recall: 0.0595238, f1: 0.1
    07527
    2019-11-30T12:19:43.935965: step: 1587, loss: 0.181742, accuracy: 0.94873, precision: 0.571429, recall: 0.0377358, f1: 0.07
    07965
    2019-11-30T12:19:43.970035: step: 1588, loss: 0.143817, accuracy: 0.964844, precision: 0.909091, recall: 0.123457, f1: 0.21
    7391
    2019-11-30T12:19:44.004880: step: 1589, loss: 0.161451, accuracy: 0.958984, precision: 0.8, recall: 0.0888889, f1: 0.16
    2019-11-30T12:19:44.037443: step: 1590, loss: 0.16805, accuracy: 0.953125, precision: 0.777778, recall: 0.0693069, f1: 0.12
    7273
    2019-11-30T12:19:44.071995: step: 1591, loss: 0.183166, accuracy: 0.950195, precision: 1, recall: 0.046729, f1: 0.0892857
    2019-11-30T12:19:44.105721: step: 1592, loss: 0.147829, accuracy: 0.962891, precision: 1, recall: 0.0843373, f1: 0.155556
    2019-11-30T12:19:44.139680: step: 1593, loss: 0.174375, accuracy: 0.953613, precision: 0.875, recall: 0.0693069, f1: 0.1284
    4
    2019-11-30T12:19:44.173123: step: 1594, loss: 0.164164, accuracy: 0.95459, precision: 0.625, recall: 0.0526316, f1: 0.09708
    74
    2019-11-30T12:19:44.207333: step: 1595, loss: 0.164846, accuracy: 0.955566, precision: 0.875, recall: 0.0721649, f1: 0.1333
    33
    2019-11-30T12:19:44.241981: step: 1596, loss: 0.178739, accuracy: 0.948242, precision: 0.5, recall: 0.0377358, f1: 0.070175
    4
    2019-11-30T12:19:44.275640: step: 1597, loss: 0.164446, accuracy: 0.95752, precision: 0.8, recall: 0.0860215, f1: 0.15534
    2019-11-30T12:19:44.309758: step: 1598, loss: 0.155464, accuracy: 0.958984, precision: 0.722222, recall: 0.141304, f1: 0.23
    6364
    2019-11-30T12:19:44.344368: step: 1599, loss: 0.150306, accuracy: 0.956543, precision: 0.647059, recall: 0.117021, f1: 0.19
    8198
    2019-11-30T12:19:44.378784: step: 1600, loss: 0.176561, accuracy: 0.953125, precision: 0.6, recall: 0.0909091, f1: 0.157895

    Test
    2019-11-30T12:19:44.577447: step: 1600, loss: 0.168501, accuracy: 0.954815, precision: 0.785714, recall: 0.0776471, f1: 0.1
    41328
    ```

        - 运行结果和单独使用clstm结果相似

    - 尝试gan+clstm

        - 仍然有bug

- 下一步工作

    - 和小组成员讨论，将gan+clstm整个框架搭建起来