文章结构

- review1: Some training and evaluation details regarding multi-task training as well as end-to-end training provided in the supplemental material could be placed into the main content.
- review1: In Eq(1) and Eq(2), W and Phi are note defined until section 3.2.

文章内容

- review1: practical inference time for the proposed method
- review2: To construct the cliques in the MRF, external knowledge on the stock groups are required. 这个需要解释
- review2: 3. How to calculate the technical indicators? Is external knowledge required in addition to the stock data set? If not, why the performance on the indicator data set is much better than the market dataset?
    - 这个文章里面有写用的库和参数，可能位置不对需要再解释
- review3: The title of this paper indicates the goal is to predict stock prices, but in their experiments, the proposed architecture is actually predicing a price movement label which is a classification problem.
    - 标题需要改
- review3: there is no experiment and evaluation demonstrating how the proposed model overcomes the first challenge - “Analyzing which groups of stocks will be affected by newly arrived information and the corresponding leading stocks”.
    - 第一个challenge不该写leading stocks，另外没有说明白，信息的到 达可以被价格波动反映出来，不需要分析文本、金融文件
- review3: The strengths of proposed model in tackling the second and third challenge in the experimental evaluation are also not clear.
    - 文中应该点名哪些模型、实验解决了哪些challenge
- review5: 1) The proposed multi-task framework is novel. Actually, I think it can be generally applicable for many time series prediction tasks. It is better for the authors to introduce some other potential applications in the paper.
    - 是否需要提及计算机视觉中的应用?
- review5: writing, typo需要改

实验

- review2: be compared with more baselines, for example, an encoder-decoder model; a multi-task baseline where the prediction of each stock is regarded as a task;
- review3: The strengths of proposed model in tackling the second and third challenge in the experimental evaluation are also not clear.
    - 实验中应该点名哪些模型、实验解决了哪些challenge；如何通过对比 说明

看不懂

- review2: The hierarchical multi-task framework seems not necessary. Why not merge the output of DARNN_trent and DARNN_volat together into a single vector? Then the hierarchical multi-task DARNN can be replaced with only a single DARNN to simplify the model.
    - 这个会失去multi-task的意义，是不是multi-task的目标（趋势、波 动）、作用没有写清楚导致别人认为不需要multi-task
- review3: 3. The paper introduces a multi-task DNNs-MRFs architecture. However, the Method section fails to discuss the multi-task part for this frameworks.
    - 此处不知是指multi-task的什么没有说清楚，是不是跟上面同样的问 题
- review3: The HMPL contains three modules of DARNN about how the model works to capture informational representations, which is not introduced at all.
- review3: It claims the first part learns informative features from the raw market data, but the discussion of this part is very brief and lacks explanation.
    - 好像跟上面是同一问题
- review3: The connection between this part and the second part, MRFs, is also missing which makes the paper not easy to follow and reproduce.
    - 如果指的是梯度下降算法，那么文中只给出了梯度求导，因为算法用 的是引用文献那篇算法，所以只给出了引用文献