From: Shay Cohen

Sent: 04 June 2018 14:31 To: ZHAN CHEN Finn

Subject: Fwd: code for AAAI paper

Dear Finn,

Hope all is well.

I am contacting you about your honors thesis.

I am forwarding an email from Yumo, a PhD student that worked on the finance project.

First, the good news is that he had a paper accepted to ACL this year, which you can take a look at to understand the data and one possible method to access this data:

Stock Movement Prediction from Tweets and Historical Prices, Yumo Xu and Shay B. Cohen, In ACL 2018 (accepted)

The second point to note: Yumo worked also on an AAAI paper that got rejected. That paper also gave pretty good results using an altogether different method. The paper can be found here <a href="http://homepages.inf.ed.ac.uk/scohen/stock.pdf">http://homepages.inf.ed.ac.uk/scohen/stock.pdf</a>

In addition, I am attaching the code that Yumo sent me. You could potentially take the model and the code that Yumo created and try to improve it further so that it gets results close to what he got in his ACL publication. Of course, new ideas would be very much appreciated as well.

The stock dataset can be found here: https://github.com/yumoxu/stocknet-dataset

Let me know if you need to have a meeting to discuss any of this.

Shay

----- Forwarded message ------

From: **XU Yumo** <<u>s1617290@sms.ed.ac.uk</u>> Date: Wed, May 30, 2018 at 3:40 PM Subject: Re: code for AAAI paper

To: Shay Cohen <scohen@inf.ed.ac.uk>

Hi Shay,

I am attaching the code for AAAI. I wrote and put in it a README file introducing the project files and how to run the project.

As to tips, tweet data is quite noisy. Therefore, a more advanced attention mechanism for learning to focus on higher-quality tweets could be a good way to go. Also, social media and historical prices are heterogeneous, depicting market features from different perspectives. Using a better alignment / combination between tweets and prices could also benefit the prediction.

Currently I am afraid I don't have a plan to make the ACL code public. Due to a series of Tensorflow update this year which are unfortunately backward incompatible, some of its modules could not even work normally. Besides, the code is not well-structured either. It could take quite a lot of time for reconstruction.

Hope it helps!

Best, Yumo

发件人: <shaybcohen@gmail.com> 代表 Shay Cohen <scohen@inf.ed.ac.uk>

日期: 2018 年 5 月 29 日 星期二 下午 3:26 收件人: XU Yumo <s1617290@sms.ed.ac.uk>

主题: code for AAAI paper

Hi Yumo,

Is there anywhere I can find the code for the \*old\* AAAI paper together with some documentation on how to run it?

I have a student who might work on that project, and I thought that your deep AAAI model could be a starting point, trying to beat your deep generative models. Also, any tips on how we might on doing that would be appreciated.

(He will of course credit your work appropriately, and if we are a paper, you will be a co-author.)

Also, are you planning to share the code for your \*ACL\* paper? I think that would be useful as well.

Best,		
Shay		

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