



CL-AFF THE HAPPINESS SHARED TASK @ AFFCON 2019

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CORPUS HIGHLIGHTS

Effort to characterize written accounts of happy moments according to their causes and constituents.

Instructions

What made you happy? Reflect on the past <duration>, and recall three actual events that happened to you that made you happy. Describe your happy moments with a complete sentence. Write three such moments. You will also be asked to note for how long each event made you happy. This task also has post-task questions. Please be sure to answer the questions. Examples of happy moments we are NOT looking for (e.g., events in distant past, incomplete sentence): *The day I married my spouse*; *My dog*.

< Enter moment here >

For how long did that event make you happy? Select the answer that is most appropriate.

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CORPUS HIGHLIGHTS

Annotating the psycholinguistic characteristics of happy moments

Instructions Read the following happy moment. Choose any of the following that applies:

Agency: Is the author in control? YES/NO

Examples of sentences where the author is in control (Answer is YES):

- *“I ran on the treadmill for 20 minutes straight when I could barely do 5 minutes 3 months ago.”*
- *“Going out to a special birthday lunch for my great-grandmother in law’s birthday.”*

Examples of sentences where the author is not in control (Answer is NO):

- *“My youngest daughter got accepted to many prestigious universities and accepted an offer to attend college in San Diego.”*
- *“A small business deal change over for small profit.”*

Social: Does this moment involve other people other than the author? YES/NO

Please note that objects (e.g., bus, work) should not be counted as social.

Examples of sentences which involve other people (Answer is YES):

- *“Going out to a special birthday lunch for my great-grandmother in law’s birthday.”*

<https://github.com/kj2013/claff-happydb>

4 CORPUS HIGHLIGHTS

Effort to characterize written accounts of happy moments according to their causes and constituents.

- ◇ Annotated corpus of 70,406 HappyDB happy moments and 17,215 new happy moments
- ◇ Annotations by Amazon Mechanical Turk workers
- ◇ Sponsorship from Adobe Research and Megagon Labs

<https://github.com/kj2013/claff-happydb>

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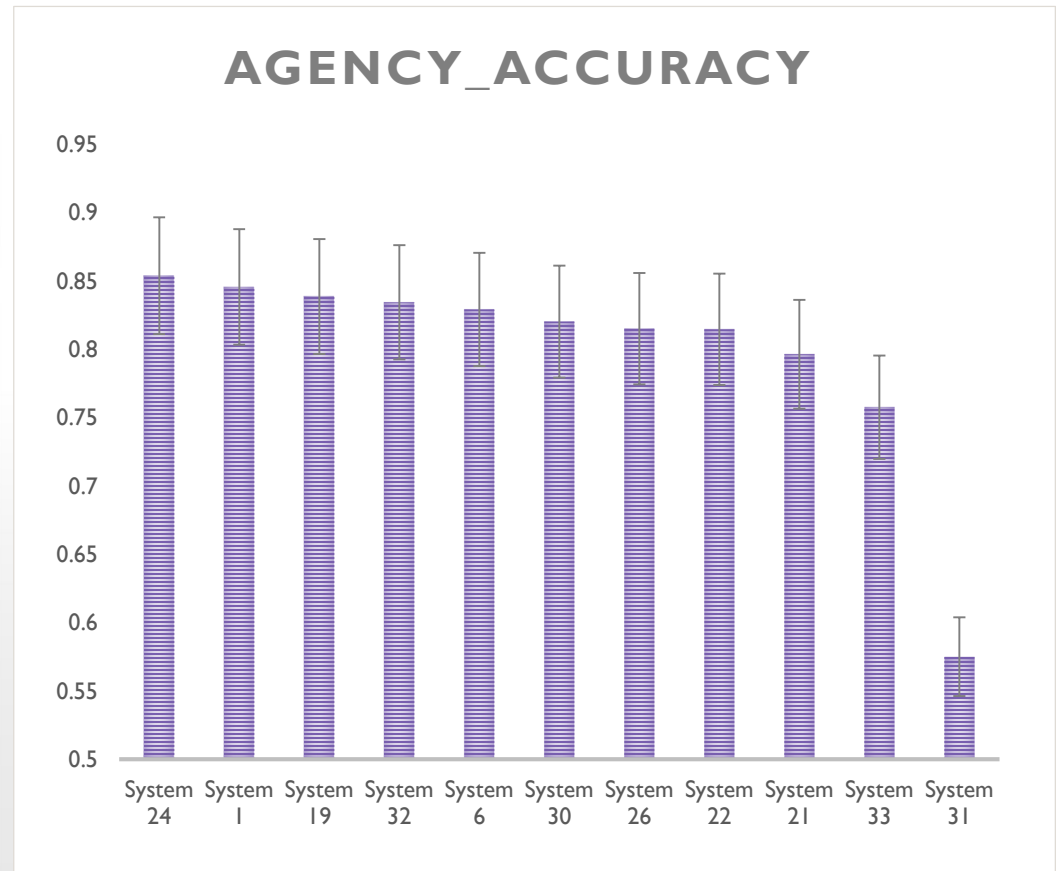
OUTLINE

- ◇ Task 1 – Predict Agency
- ◇ Task 1 – Predict Sociality
- ◇ Task 2 – Insights about happiness

- ◇ Conclusion

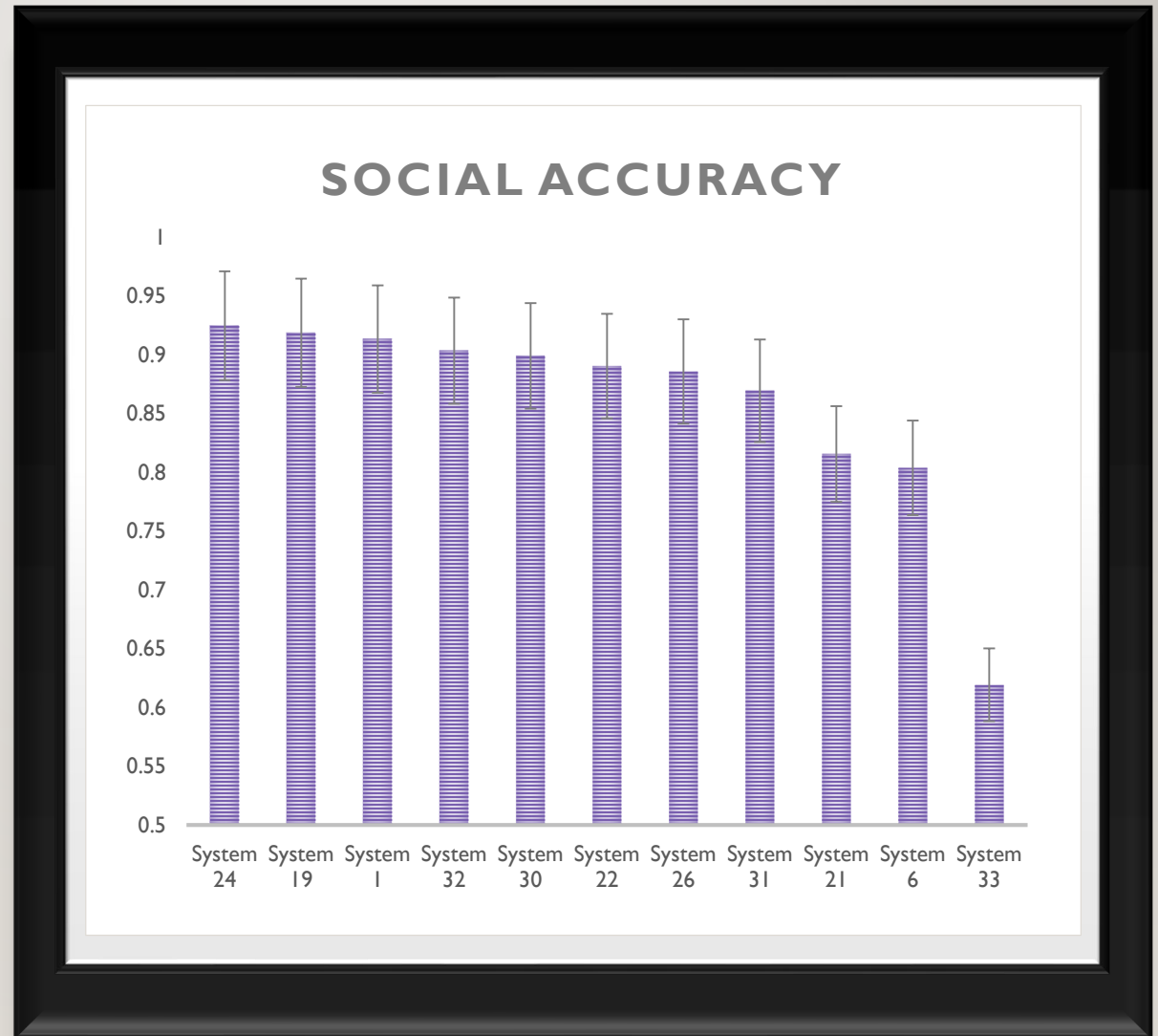
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SYSTEM RESULTS (TASK 1) AGENCY



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SYSTEM RESULTS (TASK 1) SOCIALITY



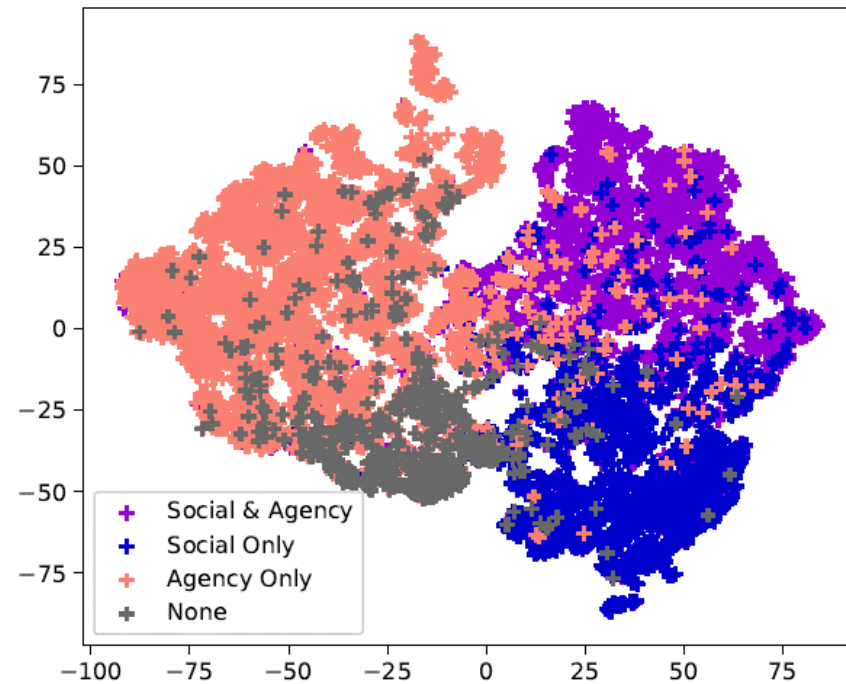
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ORAL SESSIONS

1200-1215	<ul style="list-style-type: none">Happy Together: Learning and Understanding Appraisal From Natural Language. Arun Rajendran, Chiyu Zhang & Muhammad Abdul-Mageed.
1655-1705	<ul style="list-style-type: none">Word Pair Convolutional Model for Happy Moment Classification. Michael Saxon, Samarth Bhandari, Lewis Ruskin, & Gabrielle Honda.
1705-1715	<ul style="list-style-type: none">Ingredients for Happiness: Modeling constructs via semi-supervised content driven inductive transfer. Bakhtiyar Syed, Vijayasaradhi Indurthi, Kulin Shah, Manish Gupta, & Vasudeva Varma.

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SYSTEM RESULTS (TASK 2) INSIGHTS



System 1: t-SNE projection of the 5NC post-pooling filter set outputs for each sentence.

Michael Saxon, Samarth Bhandari, Lewis Ruskin, and Gabrielle Honda
(Arizona State University, USA)

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SYSTEM RESULTS (TASK 2) INSIGHTS

I was able to celebrate **with my coworkers** at **lunch** over my CPA certification
I played video **games with my kids** and we all had a blast .
I ate a delicious **dinner with my husband** .

a. Examples of happy moments with *positive* agency label

After a long **wait** , my Amazon Payments account was finally verified .
I was happy when my son **got 90 %** marks in his examination
A good **win** for my **sports team**

b. Examples of happy moments with *negative* agency label

My two year old **daughter told** me she loves me
My granddaughter **and grandson came** over for dinner and spent the night with us .
We all **family members** went to a nearby restaurant and had a good meal .

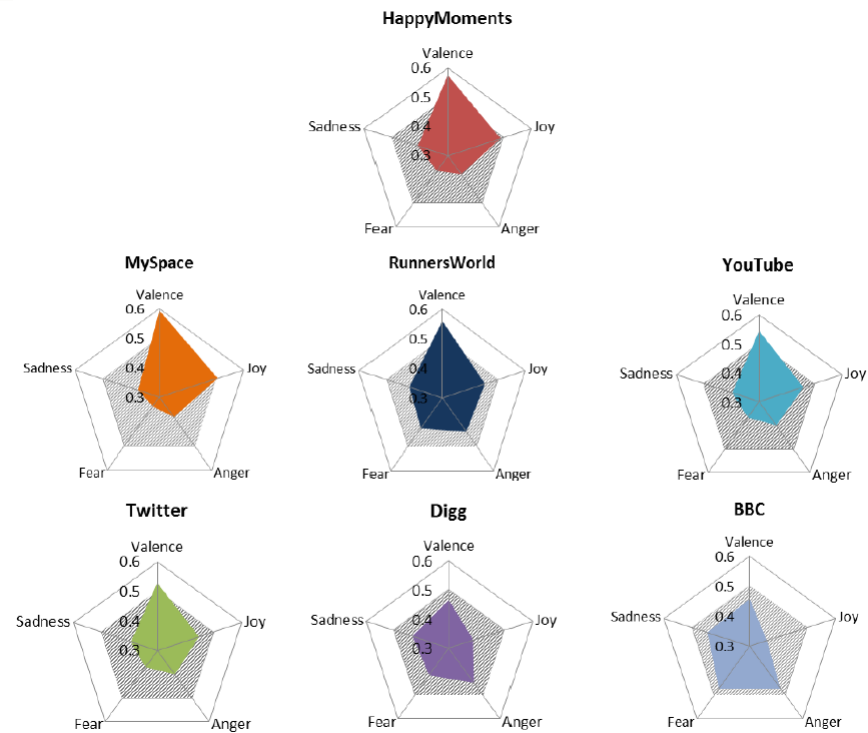
a. Examples of happy moments with *positive* sociality label

I got a **book** I **ordered** in the **mail** .
I had a good **workout** at the **gym**
I got to play with my **dog**

b. Examples of happy moments with *negative* sociality label

System 24: Attention heatmap for LSTM-A
Arun Rajendran, Chiyu Zhang, and Muhammad Abdul-Mageed
(The University of British Columbia, Canada)

SYSTEM RESULTS (TASK 2) INSIGHTS



System 22: Mean emotion intensity scores across six corpora
Raj Kumar Gupta, Prasanta Bhattacharya, and Yinping Yang
(A*STAR Singapore)

I2 KEY TAKEAWAYS

- ◇ Syntactic knowledge
- ◇ External embeddings
- ◇ Replicable

13 ERROR ANALYSIS

- Some moments were repeated in the dataset, or linguistically too similar (analyses by Daniel Claeser).
- We investigated possible dataset quality issues at the topic- and moment-level.
 - Career, Party, Animals, and Religion had higher error rates on average
 - Some happy moments were misannotated (10% noise in Agency, 5% noise in Sociality)
 - ... perhaps the labels are “Not Applicable” in these cases

14 ACKNOWLEDGEMENTS

- ◇ Wang-Chiew Tan (Megagon Labs)
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- ◇ Matthew Killingsworth (University of Pennsylvania)
- ◇ All the participants!