

Assessing Content Quality in Community Question Answering: Work-in-Progress

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Outline

- CQA & content quality issue
- Our approach & dataset
- Data labeling
- Classification results
- Future directions

COMMUNITY QUESTION ANSWERING

Community question answering

- Users ask questions
- Users answer questions
- Answers are rated by the users
- Users gain points

Community QA





Ask

What would you like to ask?

Continue



Answer

Why Yahoo! Answers? Share your knowledge, help others and be an

What are you looking for?

Search Y! Answers



baso52

Where is a city of kutaisi ?

5 years ago

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Miilee

Best Answer - Chosen by Voters

One of the ancient regions of [Georgia](#), Imereti, which constituted from the late [15th century](#). At the site where the Rioni emerges from the mountains into the plain stands the most ancient city of the Kingdom of Colchis (6th-1st centuries B.C.), [Kutaisi](#) (its name is derived from "kuata" meaning "stony"). Probably, you know from Greek mythology the legend of Jason and the Argonauts and their travel to Colchis for Golden Fleece. There is a romantical love story of Medea , the daughter of Ayetes, king of Colchis, and Jason. Medea's story is told by Euripides in tragedy "Medea".

From the 10th century to 1112, when Tbilisi was liberated from foreign conquerors, Kutaisi was the residence of Georgian kings, and in the 15th century it became the capital of

Other Answers (4)



jro660

It is in the European country of Georgia.

5 years ago

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0% 0 Votes



redunico...
TOP CONTRIBUTOR

Kutaisi (Georgian: ; ancient names: Aea/Aia, Kutatisi, Kutaissi) is Georgia's second largest city in the western province of Imereti. It is 221 km to the west of Tbilisi, with a population of about 230,000 (1989).

Source(s):

<http://en.wikipedia.org/wiki/Kutaisi>

5 years ago

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0% 0 Votes



tanyap19

Kutaisi is Georgia's second largest city in the western province of Imereti. It is 221 km to the west of Tbilisi, with a population of about 230,000 (1989).

5 years ago

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0% 0 Votes



?

Sounds Indian to me.

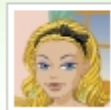
5 years ago

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0% 0 Votes

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[Home](#) > [All Categories](#) > [Beauty & Style](#) > [Makeup](#) > Resolved Question



Grecianu...

Resolved Question

[Show me another >](#)

Do you think I am cute, pretty or beautiful?

I think someone like Sophia Loren is beautiful and I think Cameron Diaz is pretty. What category would you put me in? I think possibly cute, but some would say beautiful. opinions please - only genuine answers thanks.

4 years ago

[Report Abuse](#)

skibbyja...

Best Answer - Chosen by Asker

I'd say you're vain

4 years ago

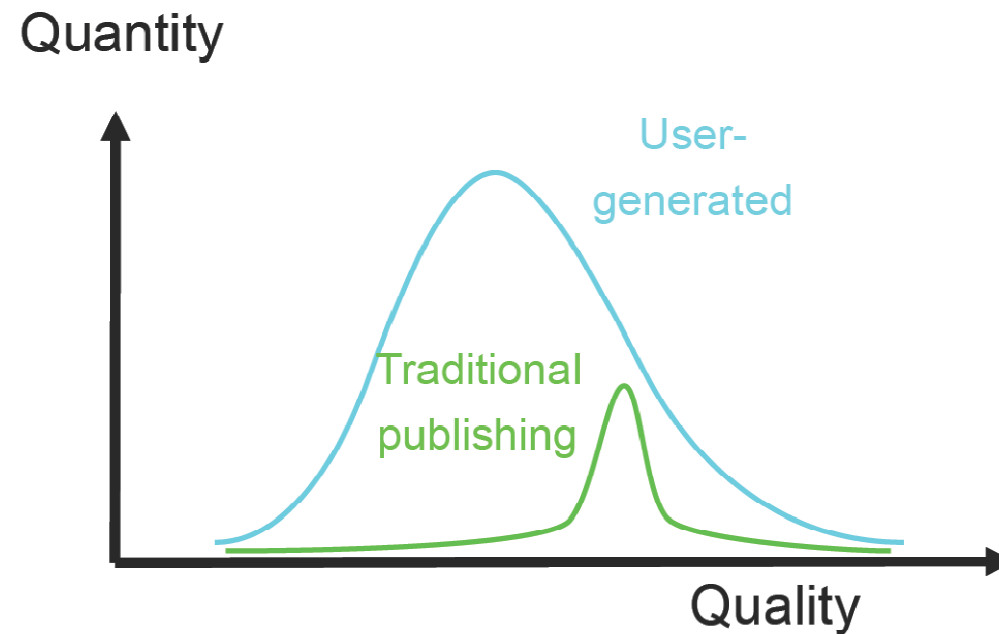
[Report Abuse](#)

8 people rated this as **good**


Asker's Rating: *****

I totally agree - i am too vain!

User-Generated Content & Quality



Adopted from Chris Anderson's "The Long Tail" (2006) via Carlos Castillo (2008)


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4 years ago [Report Abuse](#)

Harper et al. 2009
Conversational vs. informational questions


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4 years ago [Report Abuse](#)


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Agichtein et al. 2008
Graded quality of individual items

 **Not the right answer? Try Yahoo! Search**


Other Answers (27)


ButterC...

I thought you said you were the most beautiful woman in the world.??? What happened with that? You are crazy is what you are. Make up your mind. I think that you are none of the above because you are WAYYYY to into yourself. Get a life and grow up, seriously.


4 years ago [Report Abuse](#)

8 people rated this as **good**


Hillary Nance

I would say that you are right in the middle of cute and pretty. You look more mature than cute but a little less than pretty.

4 years ago [Report Abuse](#)


KendallK...

is that picture of you? the if it is i think ur pretty. you have nice hair and a pretty smile but i defeinetly wouldnt say ur gorjuss. sorry. i would say someone like jessica simpson or miley cyrus or ashley tisdale is beautiful

~ kendall xoxoxoxoxoxoxoxoxoxoxoxoxo

4 years ago [Report Abuse](#)

Kutaisi 2011

OUR APPROACH & DATASET

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 4 years ago

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 do you think i am cute beautiful pretty Search

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 Kutaisi 2011

Harper et al. 2009
Conversational vs. informational questions

Agichtein et al. 2008
Graded quality of individual items

Our approach

- SE setting
- *informational vs. non-informational*
- in-page features
- Otvety@Mail.Ru

Our Approach

- An HTML page as a whole (SE indexing unit)
- Informational pages vs. others
- A less sophisticated model, but easier to maintain (SE settings)
- Only in-page features (*so far...*)
- Untouched source of data

Otvety@Mail.Ru

- A Russian counterpart of Y!Answers
- Launched 21 Aug 2006
- 50M+ users
- 60M+ questions
- 335M+ answers
- 58K new users, 52K questions, 235K answers daily

<http://otvet.mail.ru/news/#hbd2011>

[Главная](#) » [Спорт](#) » [Футбол](#) » Решенный вопрос



@ [ООП](#) **Мудрец** (17858)

Закрывает: 5 месяцев назад

[Подарить стикер!](#) **NEW**

Лучший футболист Торпедо Кутаиси всех времён?



Оценка: 0 [Рейтинг](#): 0

Лучший ответ



@ ["Экибастузец"](#) **на ответах** **Искусственный Интеллект** (545967) 5 месяцев назад [\(ссылка\)](#)

[Нарушение!](#) [Подарить стикер!](#) **NEW**

Шенгелия



Оценка: 0 [Рейтинг](#): 0

Другие ответы



@ [Ф.К.С.М.](#) **Оракул** (97777) 5 месяцев назад [\(ссылка\)](#)

[Нарушение!](#) [Подарить стикер!](#) **NEW**

Джемал Херхадзе-гвардеец команды.

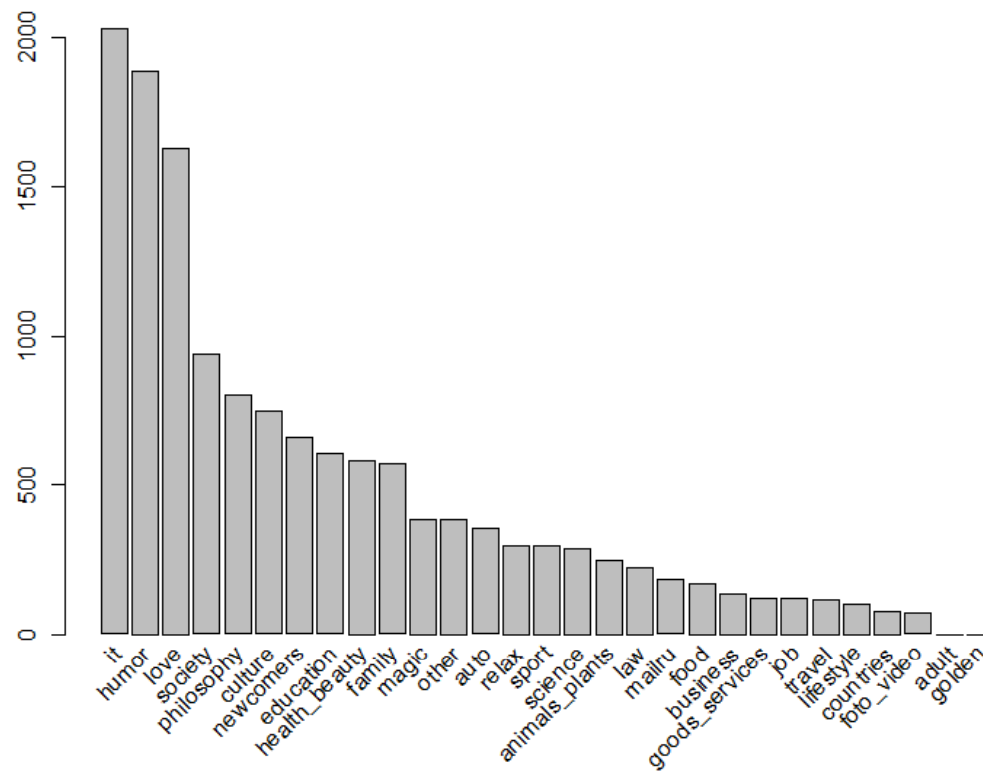


Оценка: 0 [Рейтинг](#): 0

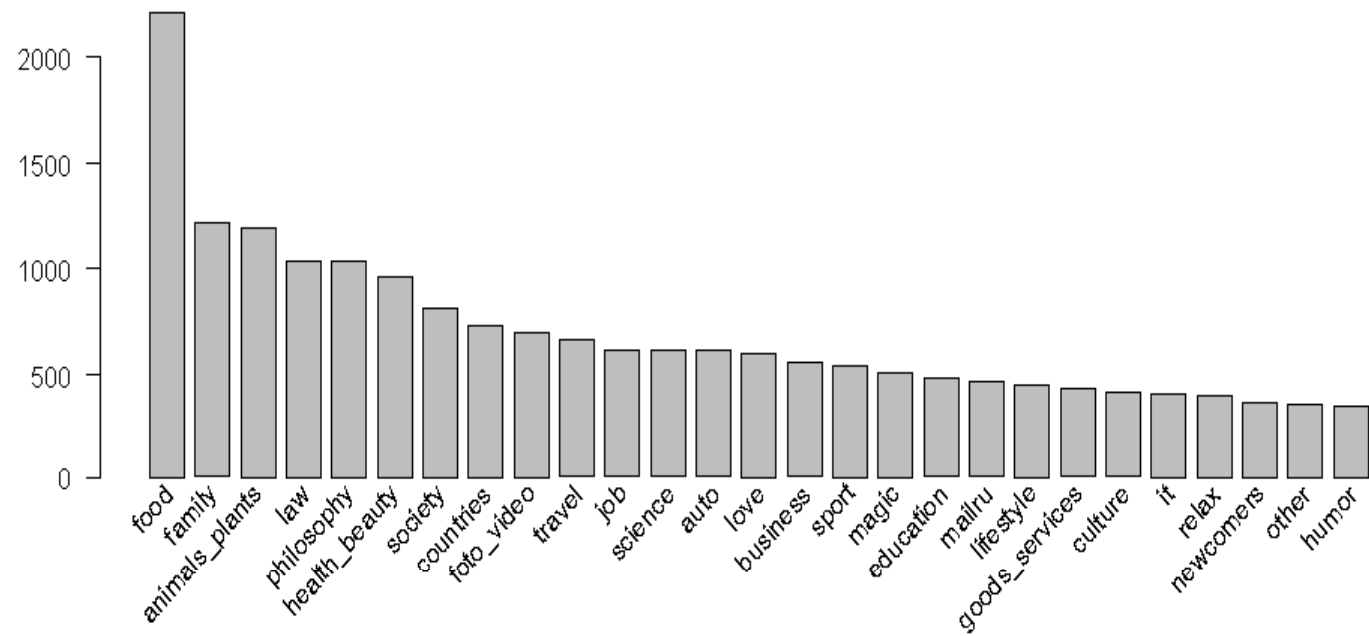
Dataset

- Otvety@Mail.Ru
- Every 1000th question from 27.09.2009 to 07.11.2010
- 14,065 questions / 75,717 answers
- 11,625 users
- + graph of all their interactions
→ 7,631,566 edges '*X answered Y's question*'

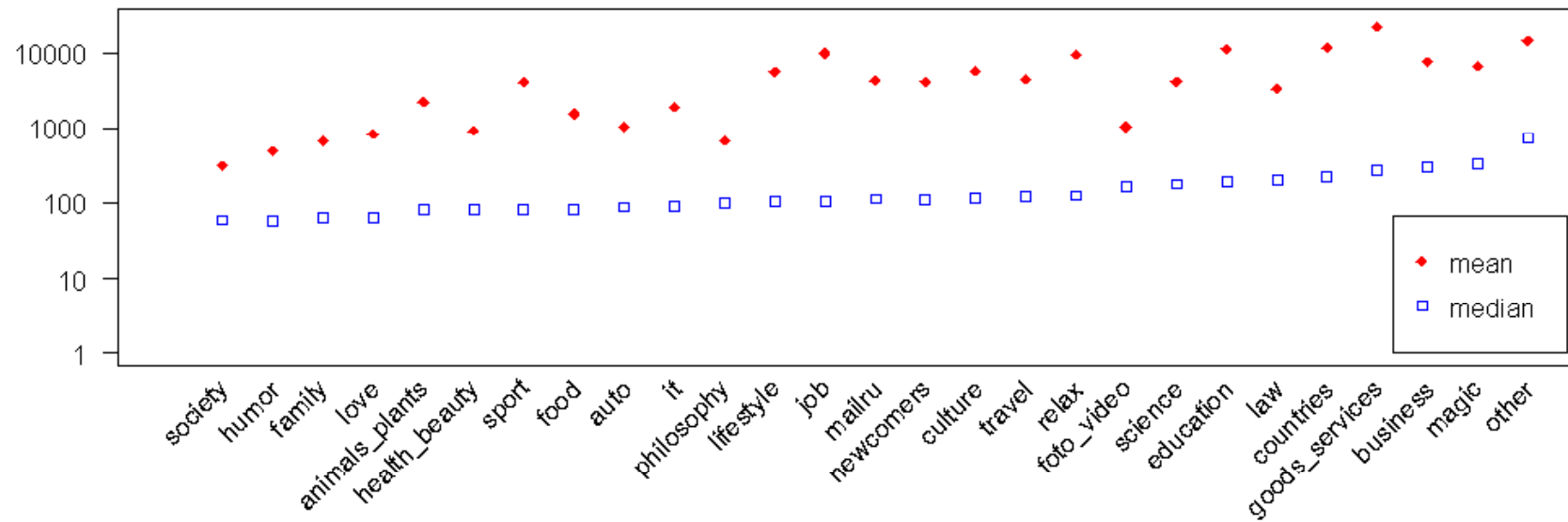
Categories by Size



Thread Size by Category

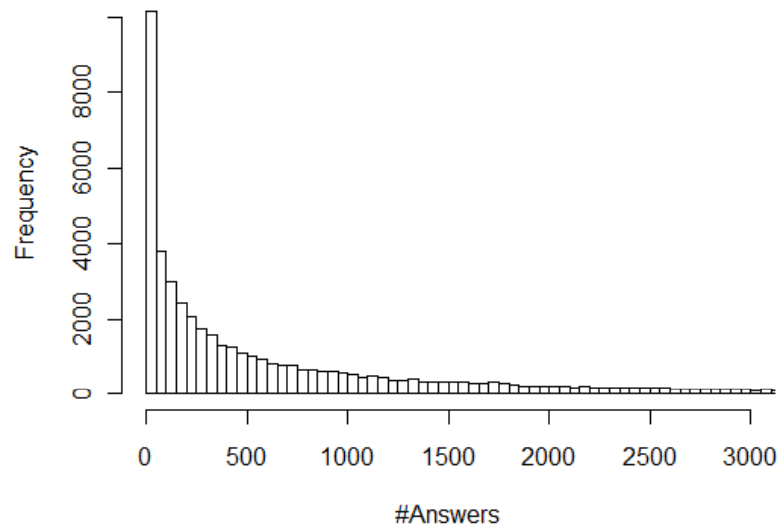


Time to First Answer

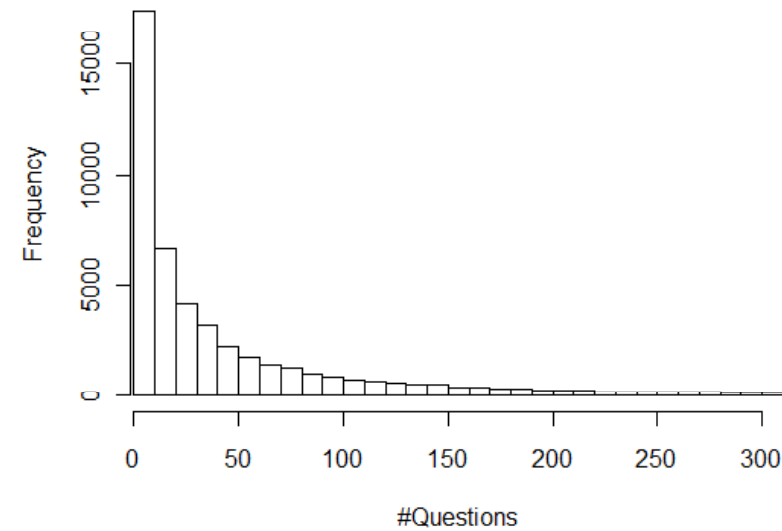


User Activity

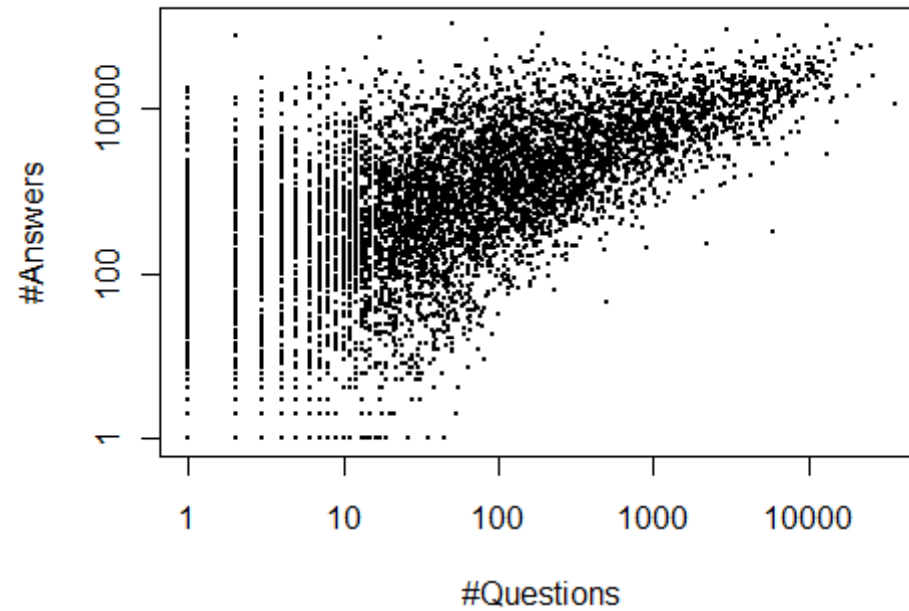
#Answers by a user



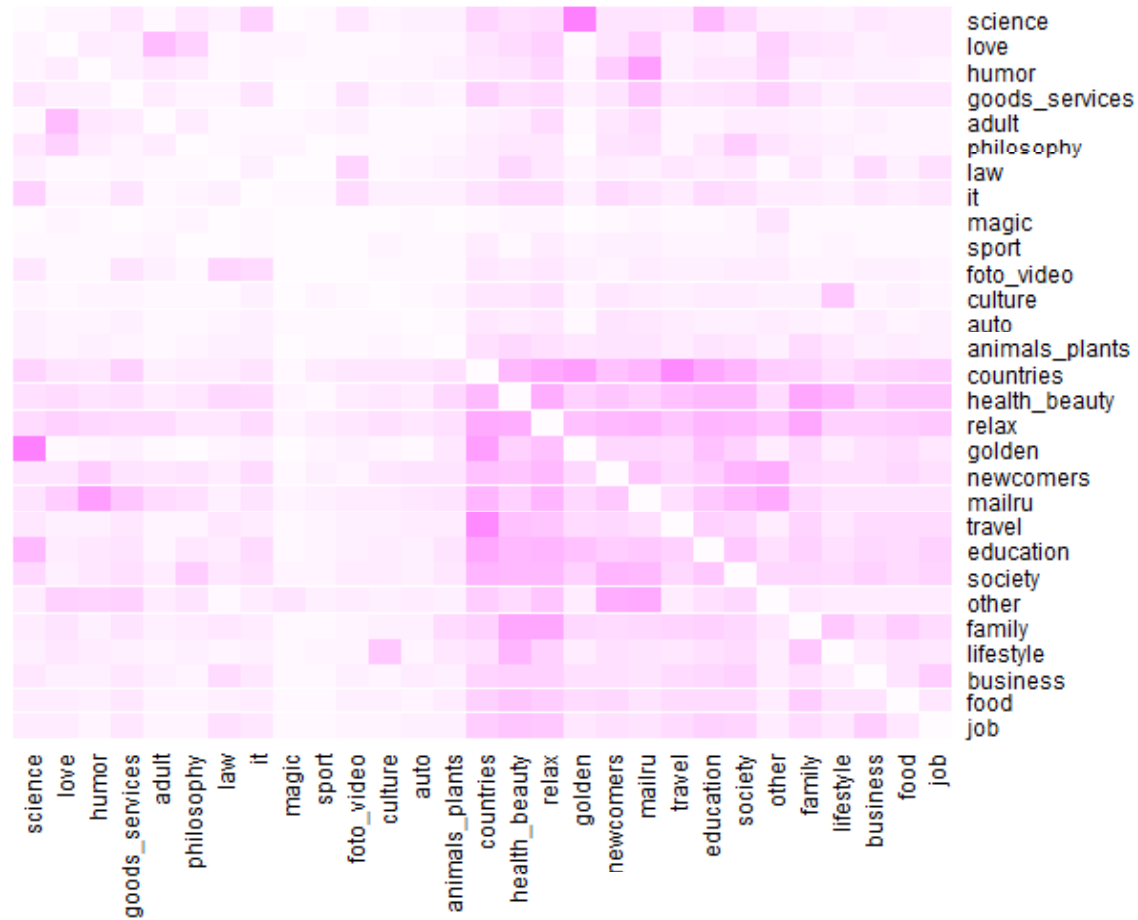
#Questions by a user



User Activity – 2



Similarity of Categories



DATA LABELING

Labeling

2 assessors

Task: to tag thread as *informational* or *non-informational*



Оценка

Вопрос #4 из 20

Знакомства, Любовь, Отношения / Отношения

by Анята Черненко (Ученик)

Что делать,если не можешь забыть любимого человека и чувствуешь,что он твоя судьба? Прошло уже 2 года.

by Sivilia & amp; (Профи)

Если не можешь забыть, надо встретиться и попытаться продолжить отношения, или хотя бы поговорить. От этого многое может измениться. Скорее всего это от незаконченности отношений.

by Сергей Monterey (Мыслитель)

Переключиться на другого,и почувствовать,что он твоя судьба)))))))))))

Неинформативное

Информативное

Затрудняюсь

Старая оценка: Неинформативное

После нажатия на кнопку "Оставить комментарий",
появится это поле.

[Оставить комментарий](#)

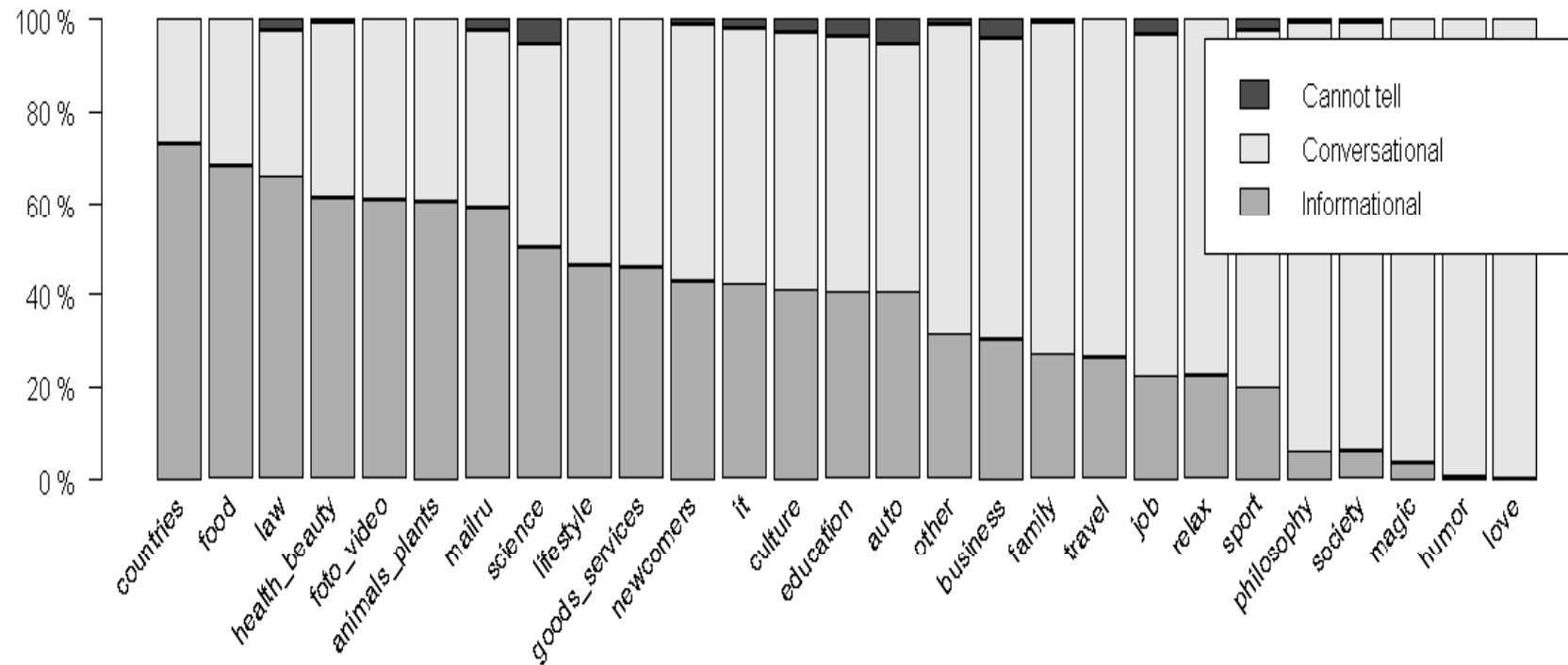
[Назад](#)

[Вперед](#)

Tagging Results

- 2,000 documents
- 1,070 document judged by both assessors
- Agreement on 916 docs
(*inf*: 216, *non-inf*: 700)
- Disagreement on 154 docs
- Average time per document: 15.33 sec

inf vs. non-inf by Category



CLASSIFICATION & FUTURE DIRECTIONS

Features

- **Complexity and size (C):** # of words, # of answers, avg. answer length, avg. word & sentence length
- **Question (Q):** first-person pronouns, question words
- **Text well-formedness (W):** misspelled words , capitalized sentences, well-formed punctuation, punctuation density, ...
- **Informality (I):** CAPS words,)))), ??!! , smileys
- **User activity (U):** efficiency of asker, activity level of asker, average & max levels of answerers (*from Mail.Ru*)
- **External content (E):** hyperlinks, images, video
- **Other (O):** best answer presence, top-level category

Preliminary Classification Results

- Method: SVM with RBF kernel
- Accuracy: 0.81
- Precision: 0.67
- Recall: 0.45
- F1: 0.53

Future Directions

- Feature engineering
- Feature selection
- Classifier tweaking
- Active learning approach
- Analysis of crowdsourced vs. assessor judgments

(Informational and conversational)
questions?

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vadimkantorov@gmail.com