Creating and running experiments on Mechanical Turk and CrowdFlower

Crowdsourcing works for tasks that are:

Decomposable into simpler tasks that can be joined together

and/or

Parallelizable into small, quickly completed chunks

Crowdsourcing works for tasks that are:

Balanced so that each task contains the same amount of work

- Don't have tons of work in one assignment but not another
- Don't ask workers to annotate something occurs in the data <<10% of the time

Crowdsourcing works for tasks that are:

Well-suited to **quality control** (e.g. some data has known correct answers)

but

Robust to some amount of noise/errors (e.g. the end goal is to train a statistical model)

Preset Templates

Start a New Project

Categorization

Data Collection

Moderation of an Image

Sentiment

Survey

Survey Link

Tagging of an Image

Transcription from A/V

Transcription from an Image

Writing





Business URL Collection A





Content Moderation

Search Relevance A



Sentiment Analysis



Paraphrase judgement

(Running example for today...)

Instructions - click to hide

Please check all paraphrase which could replace the blue word in the context shown, using your best judgement. The paraphrase should retain the meaning of the original phrase and make sense in context. Most sentences will have at least one good paraphrase, but some will not. If none of the paraphrases listed fit the context shown, select NONE.

It is okay if the paraphrased sentence is contains small grammatical errors, as long as they do not drastically alter the meaning. E.g. the following is an okay paraphrase:

The boy is running.

The boys is running.

but the following is a bad paraphrase:

I am running.

You are running.

17. occasionally, students spend the night in a youth hostel, where they share stories with peer travelers from around the world.
 now and then just sometimes only occasionally now and again every now and then some times
 once in a while for once here and there None of these paraphrases are good

Demos!

- 1. Mechanical Turk web interface
- 2. Mechanical Turk API, via Python (http://boto.readthedocs.org/en/latest/ref/mturk.html)
- 3. CrowdFlower web interface
- 4. CrowdFlower API, via Python (https://github.com/peoplepattern/crowdflower)

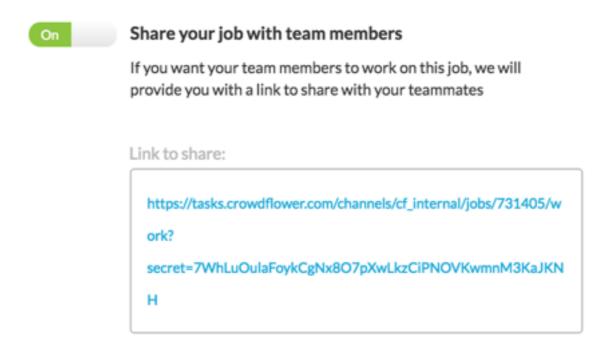
Development sites



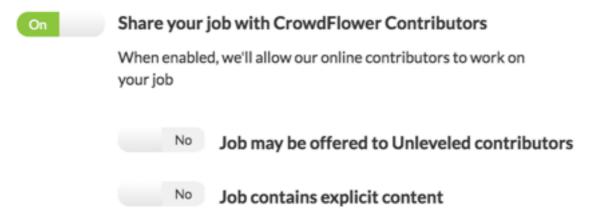
https://requestersandbox.mturk.com

Development sites

Internal Contributors



External Contributors



https://make.crowdflower.com/jobs/JOB_ID/settings/channels

Instructions - click to hide

Please check **all** paraphrase which could replace the blue word in the context shown, using your best judgement. The paraphrase should **retain the meaning of the original phrase** and make sense in context. Most sentences will have at least one good paraphrase, but some will not. If none of the paraphrases listed fit the context shown, **select NONE**.

Instructions - click to hide

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I have a question about these hits. When the saying I have a question about these hits. When the saying is upstitution makes the sentence end up saying substitution makes the sentence end up saying of the same substitution makes the sentence end up saying substitution makes the sentence end up saying substitution makes the sentence end up saying substitution of the same substitution of the sa

I'm a little confused about when one word is a variant of another. On the linked page of expanded definitions it says "other relation" should be used when it is two forms of the same word. It uses on each hit page the first example of ancestor and uses show and showy and says to classify this type?

Instructions - click to hide

Please check all paraphrase which could replace the blue word in the context shown, using your best judgement. The paraphrase should retain the meaning of the original phrase and make sense in context. Most sentences will have at least one good paraphrase, but some will not. If none of the paraphrases listed fit the context shown, select NONE.

It is okay if the paraphrased sentence is contains small grammatical errors, as long as they do not drastically alter the meaning. E.g. the following is an okay paraphrase:

The boy is running.

The **boys** is running.

but the following is a bad paraphrase:

I am running.

You are running.

It is okay if the paraphrased sentence contains more/less detail than the original sentence, as long as it does not drastically alter the meaning. E.g. the following is an okay paraphrase:

The **person** is running.

The **boy** is running.

but the following is a **bad paraphrase**:

The cells undergo development.

The cells undergo economic development.

The paraphrase should make sense in the particular sentence shown. E.g. the following is a bad paraphrase, even though center might be a good paraphrase for heart in some other contexts.

The **heart** is an organ.

The center is an organ.

These HITs will be quality controlled. If you are unsure whether or not you are doing them well, we recommend you do a small number and wait for feedback before continuing.

Thank you in advance!

Instructions - click to hide

Please check all paraphrase which co sense in context. Most sentences will

It is okay if the paraphrased sentence

The **boy** is running.

The **boys** is running.

but the following is a bad paraphra:

I am running.

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It is okay if the paraphrased sentence

The **person** is running.

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but the following is a bad paraphra:

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The cells undergo economic develo

The paraphrase should make sense i

The **heart** is an organ.

The center is an organ.

These HITs will be quality controlle

Thank you in advance!

- ✓ If your task can't be expressed in one paragraph + bullets, then probably break it up
- ✓ Include an example of a right answer and a wrong answer
- ✓ Clarify what you expect if the HIT is not doable (e.g. because of missing data or other problems)

g of the original phrase and make ONE.

/ paraphrase:

ving is an okay paraphrase:

se for heart in some other contexts.

ack before continuing.



← Previous 1 2 3 4 5 6 7 8 9 ... 15 16 Next →

Approve Reject									
<u>HIT ID</u> ▲	Worker ID	Lifetime Approval Rate	Input.HIT Num	Input.Instance Id1	Input.Doc Id1	Input.Sent Id1	Input.Sentence1	Input.Two Before1	
302U8RURJZ1S2C6CV3ZQM0GTGEONVJ	A2YTOX7SEDJ1TC	100% (23/23)	9	238	P155842	16	IMPRESSION: Developmental anomaly of the right	No definite abnormality is seen in the visualiz	
302U8RURJZ1S2C6CV3ZQM0GTGEONVJ	A312KFQ78WB3A4	99% (67/68)	9	238	P155842	16		No definite abnormality is seen in the visualiz	

amazon mechanical turk™ Artificial Artificial Intelligence



- YOU have all the power
- After reviewing a Worker's submission, you can
 - approve it (worker gets paid)
 - reject it (worker does not get paid)
 - block the worker (worker is banned from working on any of your HITs, and may get blacklisted from MTurk)

15 16 Next →

Input.Two Before1

o definite normality is en in the ualiz...

o definite normality is en in the ualiz...



Your job requires more funds than what was previously allocated (i)



Previous estimate: \$10.09

New estimate: \$47.76

373.32% above expected

Crowd costs \$39.80 Transaction Fee (20%) \$7.96

\$37.67 due now



(i)

Your

- CrowdFlower decides who to approve/reject
- Downloaded final results come with confidence/trust scores
- Prepay for work, based on CrowdFlower's projected cost estimates
 - Good gold data/Quiz Mode helps prevent problems