

Clickbait Challenge 2017

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www.clickbait-challenge.org

Outline

- I. Background
- II. Corpus Construction
- III. TIRA Shared Task

Background

Clickbait Detection at ECIR 2016

Clickbait Detection

Martin Potthast, Sebastian Köpsel, Benno Stein, and Matthias Hagen

Bauhaus-Universität Weimar

[Clickbait Detection]

- ❑ Clickbait Corpus containing 3000 annotated tweets.
- ❑ Baseline Classifier.

Background

Google DNI Fund

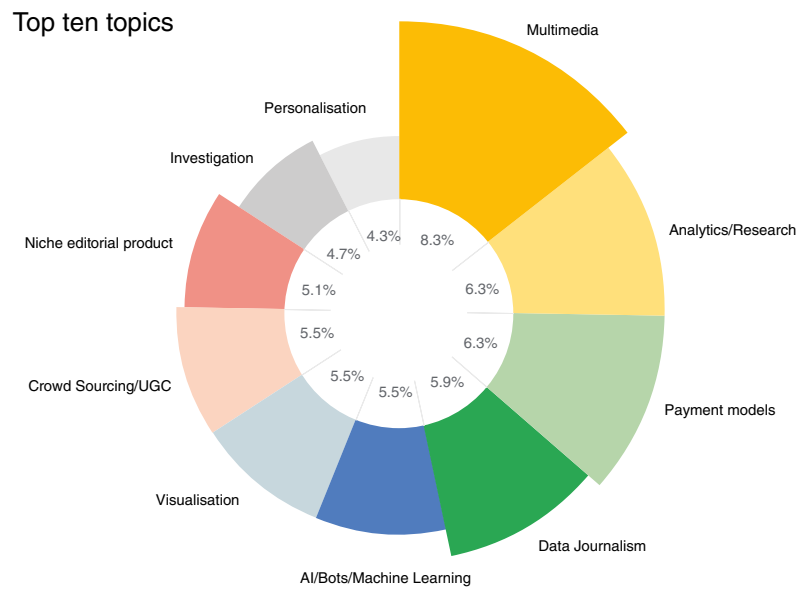


The Digital News Initiative (DNI) is a partnership between Google and publishers in Europe to support high-quality journalism through technology and innovation.

252
projects funded

51
million Euros funded

27
EU countries involved



Corpus Construction

Crawling Twitter Tweets

Twitter Crawler

Status

no running crawl process

- last crawl: 13:25:54, 26.10.2017
- crawl interval: 2h
- estimated next crawl: 15:25:54, 26.10.2017
- number of crawled tweets: 928,509

Settings

Users:

buzzfeed bbcworld nytimes mashable abc cnn guardian huffpost
forbes bleacherreport foxnews nbcnews yahoo mailonline espn wsj
businessinsider telegraph washingtonpost independent billboard
indiatimes usatoday Breitbartnews business cbsnews complex

Update Users

Update Since Ids

[Twitter Crawler]

- ❑ Cron job fetched and stored the **tweets of 27 news publishers** together with the respective target web pages every two hours.
- ❑ From November 2016 until June 2017, **more than 500,000 tweets** were stored together with the respective linked web pages.
- ❑ For main content extraction, we implemented **content wrappers for each publisher**.
- ❑ To avoid publisher and topic biases, we sampled a **maximum of ten tweets per day per publisher**.

Corpus Construction

Crowdsourcing of Clickbait Annotations

The most diverse place in America? It's not where you think: [Link](#)



not click baiting (0.0) slightly click baiting (0.33) considerably click baiting (0.66) heavily click baiting (1.0)

- ❑ **Amazon Mechanical Turk** was used to crowdsource clickbait annotations.
- ❑ We tried **different task designs** which varied with respect to (1) the given instructions, (2) the scale on which clickbait is measured, (3) the number of tweets per HIT, and (4) highlighting of indicative words.
- ❑ We ended up using a **4-point scale, 10+2 tweets per HIT, and no word highlighting.**

Corpus Construction

Annotation Quality Control

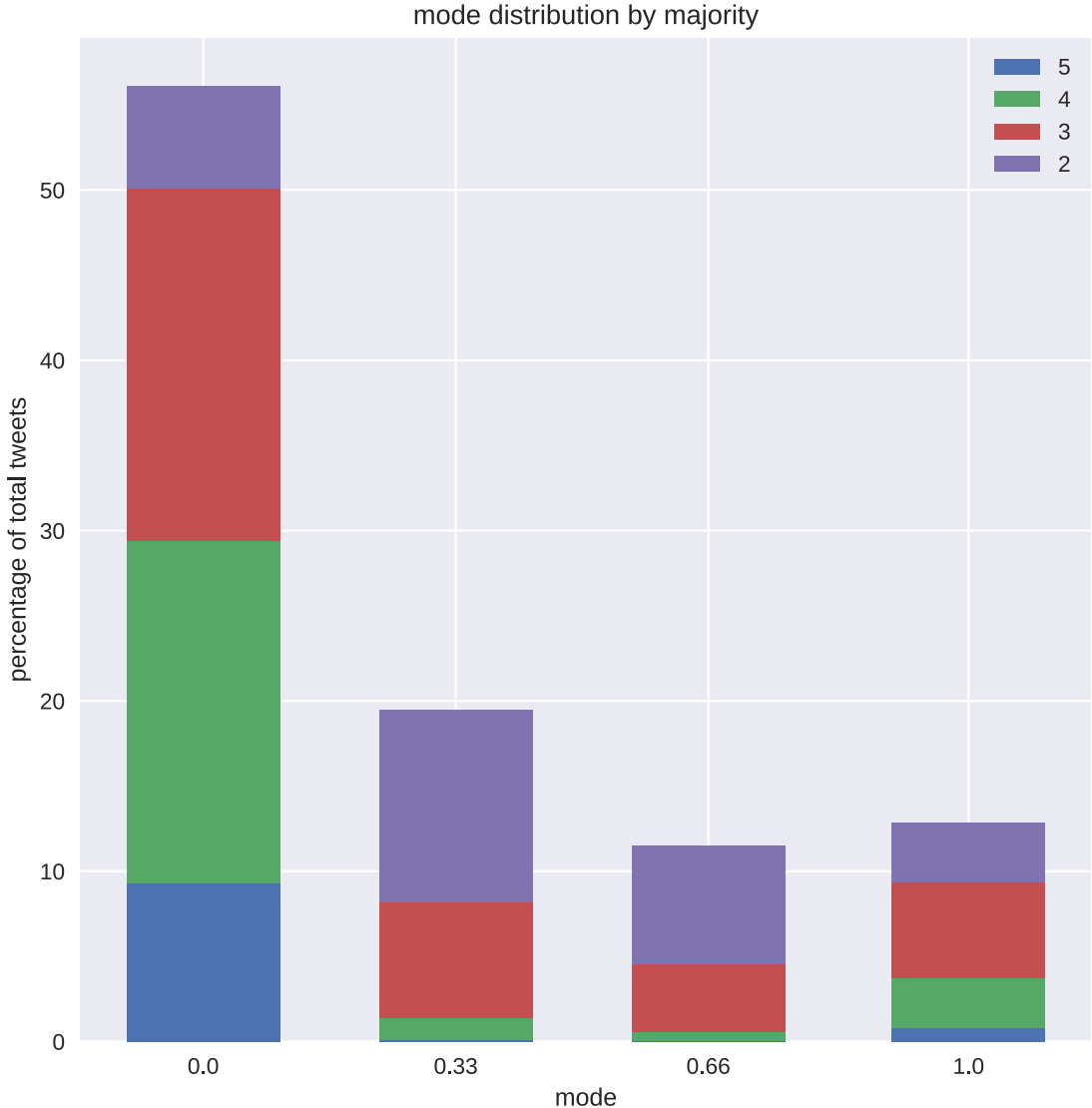


[Reviewing System]

- ❑ Each tweet got **annotated five times**.
- ❑ To assess the quality of annotation, each HIT contained **two check instances** from our previous corpus.
- ❑ A reviewing system allowed us to **review HITs visually** (including accepting/rejecting assignments).
- ❑ Still, it was **a lot of work**.
- ❑ In total, **40,000 tweets** were annotated.

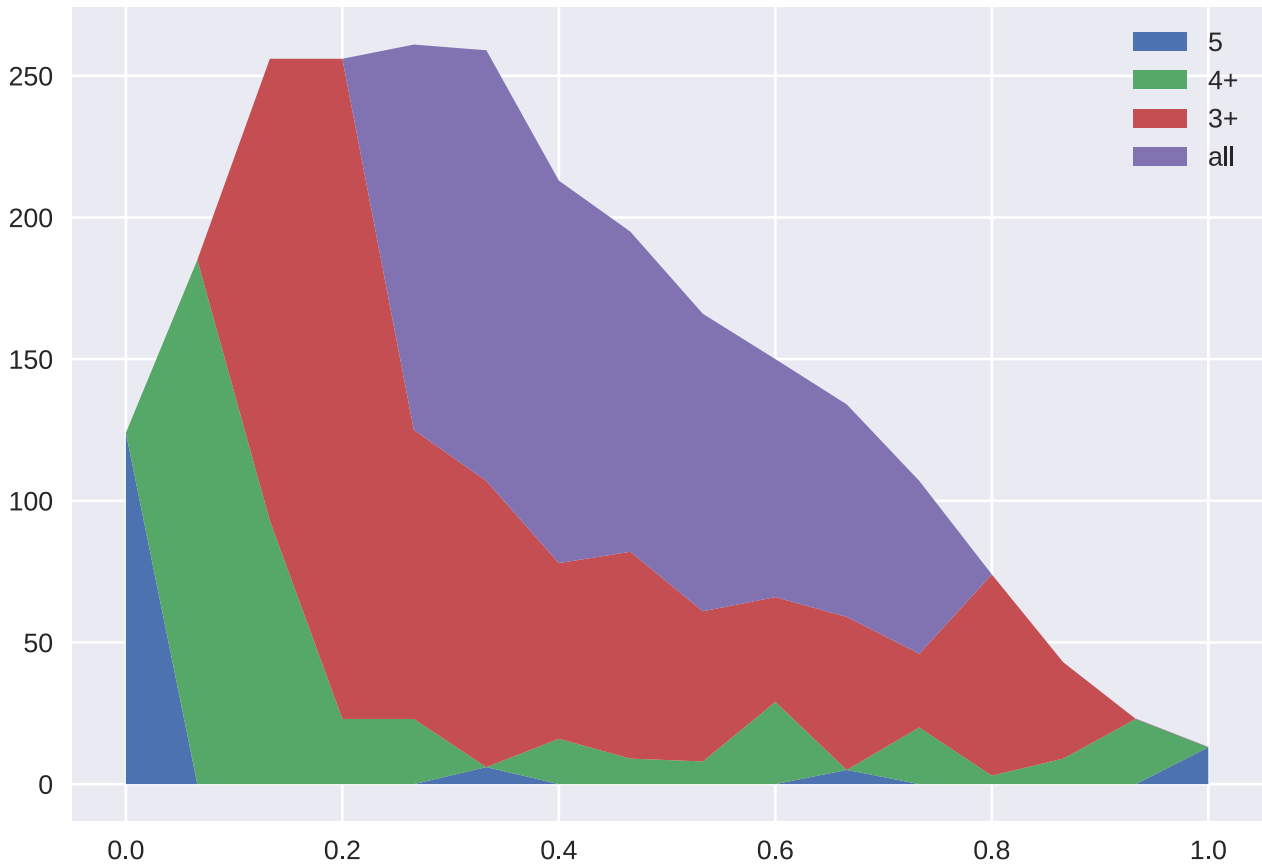
Corpus Construction

Statistics – Mode



Corpus Construction

Statistics – Mean



Corpus Construction

Statistics – Publisher Differences



TIRA Shared Task

Participation

Clickbait Detection

Task	Develop a classifier that rates how click baiting a social media post is.
Training datasets	2
Test datasets	2
Measures	
Web	http://www.clickbait-challenge.org/
Participants	20
Softwares	24
Runs	256

[Join task](#) [View results](#)

[TIRA Clickbait Detection Task]

- ❑ **100 registrations.**
- ❑ **33 VMs** assigned.
- ❑ 24 software submissions from **13 teams.**
- ❑ **10 notebook submissions.**

TIRA Shared Task

Evaluation Results

Team	MMSE	F1	Prec	Rec	Acc	Runtime
zingel	0.033	0.683	0.719	0.650	0.856	00:03:27
emperor	0.036	0.641	0.714	0.581	0.845	00:04:03
carpetshark	0.036	0.638	0.728	0.568	0.847	00:08:05
arowana	0.039	0.656	0.659	0.654	0.837	00:35:24
pineapplefish	0.041	0.631	0.642	0.621	0.827	00:54:28
whitebait	0.043	0.565	0.699	0.474	0.826	00:04:31
clickbait17-baseline	0.044	0.552	0.758	0.434	0.832	00:37:34
pike	0.045	0.604	0.711	0.524	0.836	01:04:42
tuna	0.046	0.654	0.654	0.653	0.835	06:14:10
torpedo	0.079	0.650	0.530	0.841	0.785	00:04:55
houndshark	0.099	0.023	0.779	0.012	0.764	00:26:38
dory	0.118	0.467	0.380	0.605	0.671	00:05:00
salmon	0.174	0.261	0.167	0.593	0.209	114:04:50
snapper	0.252	0.434	0.287	0.893	0.446	19:05:31

[TIRA results]