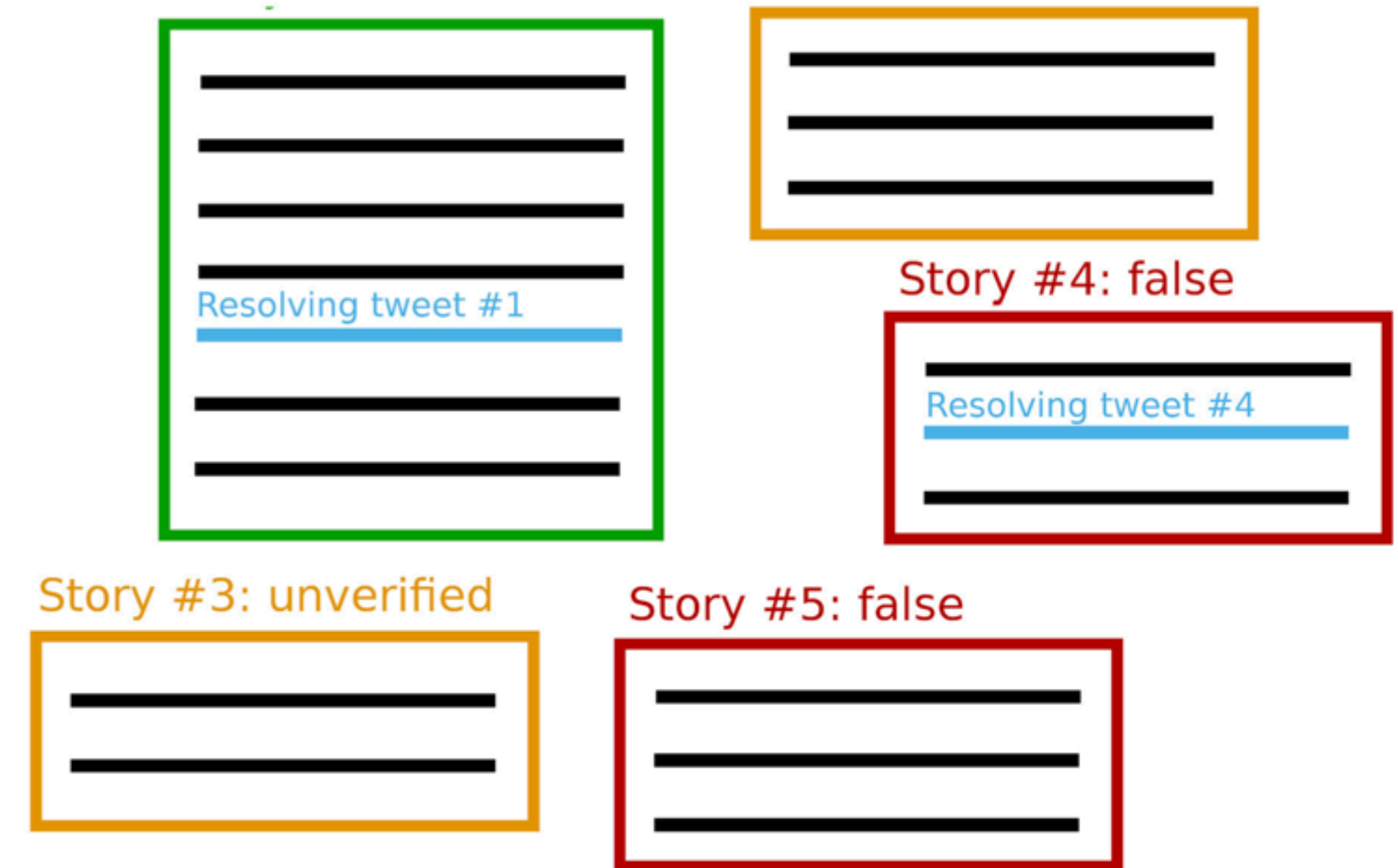


Research of Event label on Twitter datasets

Moreover, most existing approaches regard rumor detection as a binary classification problem, which predicts a candidate hypothesis as rumor or not. Since a rumor often begins as unverified and later turns out to be confirmed as true or false, or remains unverified (Zubiaga et al., 2016), here we consider a set of more practical, finer-grained classes: false rumor, true rumor, unverified rumor, and non-rumor, which becomes an even more challenging problem.

Ma, Gao, and Wong 2017









Our datasets consist of rumour stories, represented by squares, which can be one of true (green), false (red), or unverified (orange). Each of the rumour stories has a number of rumour threads associated with it, which we represent as black lines that form a timeline where threads are sorted by time. When a story is true or false, the journalists also picked, within the story's timeline, one tweet as the resolving tweet. Note that the resolving tweets cannot always be found within the Twitter timeline, as in example story #5.

Zubiaga et al., 2016

Research of Event label on Twitter datasets

Finally, we annotated the source tweets by referring to the labels of the events they are from. We first turned the label of each event in Twitter15 and Twitter16 from binary to quaternary according to the veracity tag of the article in rumor debunking websites (e.g., snopes.com, Emergent.info, etc). Then we labeled the source tweets by following these rules: 1) Source tweets from unverified rumor events or non-rumor events are labeled the same as the corresponding event's label; 2) For a source tweet in false rumor event, we flip over the label and assign true to the source tweet if it expresses denial type of stance; otherwise, the label is assigned as false; 3) The analogous flip-over/no-change rule applies to the source tweets from true rumor events.

Ma, Gao, and Wong 2017

	True This rating indicates that the primary elements of a claim are demonstrably true.
	Mostly True This rating indicates that the primary elements of a claim are demonstrably true, but some of the ancillary details surrounding the claim may be false.
	Mixture This rating indicates that a claim has significant elements of both truth and falsity to it such that it could not fairly be described by any other rating.
	Mostly False This rating indicates that the primary elements of a claim are demonstrably false, but some of the ancillary details surrounding the claim may be true.
	False This rating indicates that the primary elements of a claim are demonstrably false.
	Unproven This rating indicates that insufficient evidence exists to establish the given claim as true, but the claim cannot be definitively proved false. It is used for claims for which there is little or no affirmative evidence, but for which declaring them to be false would require the difficult (if not impossible) task of proving a negative or accurately discern someone else's thoughts and motivations.

<https://www.snopes.com/fact-check-ratings/>

<div>Unverified</div>	<div>APPLE</div> <div>Claim: Samsung will supply application processors for Apple Watch</div> <div>Originating Source: businesskorea.co.kr Added Nov 26</div>
<div>True</div>	<div>VIRAL</div> <div>Claim: A man in England is wanted by police for slapping people who sneeze in public</div> <div>Originating Source: newsandstar.co.uk Added Mar 23</div>
<div>False</div>	<div>VIRAL</div> <div>Claim: Doctors confirmed the first case of death by genetically modified food</div> <div>Originating Source: worldnewsdailyreport.com Added Mar 9</div>

<http://www.emergent.info/>