

Dr.Watson

Final presentation – Friday, June 15th

Group: GestIT



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Front-end & Data visualization



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UX & Front-end development



Hichame Yessou
Front-end & Data visualization



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AI development



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AI development



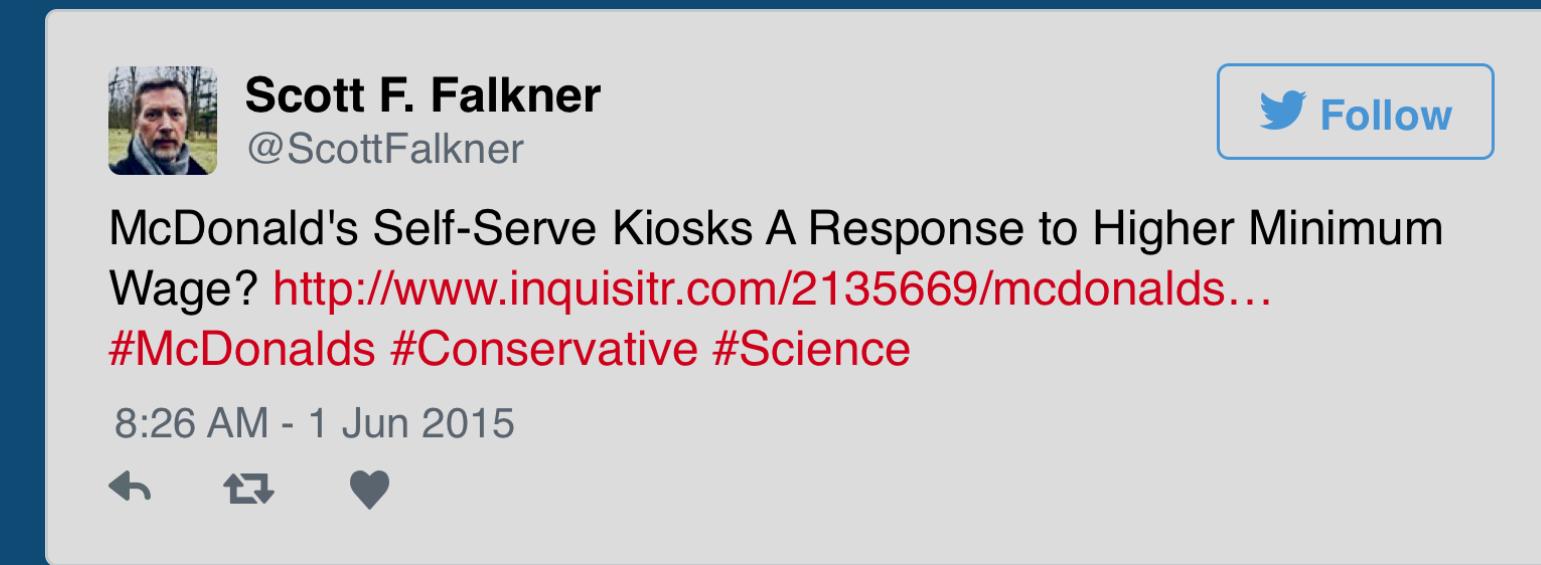
Alessio Baccelli
AI development



Luca Comoretto
AI development

What's a Fake News

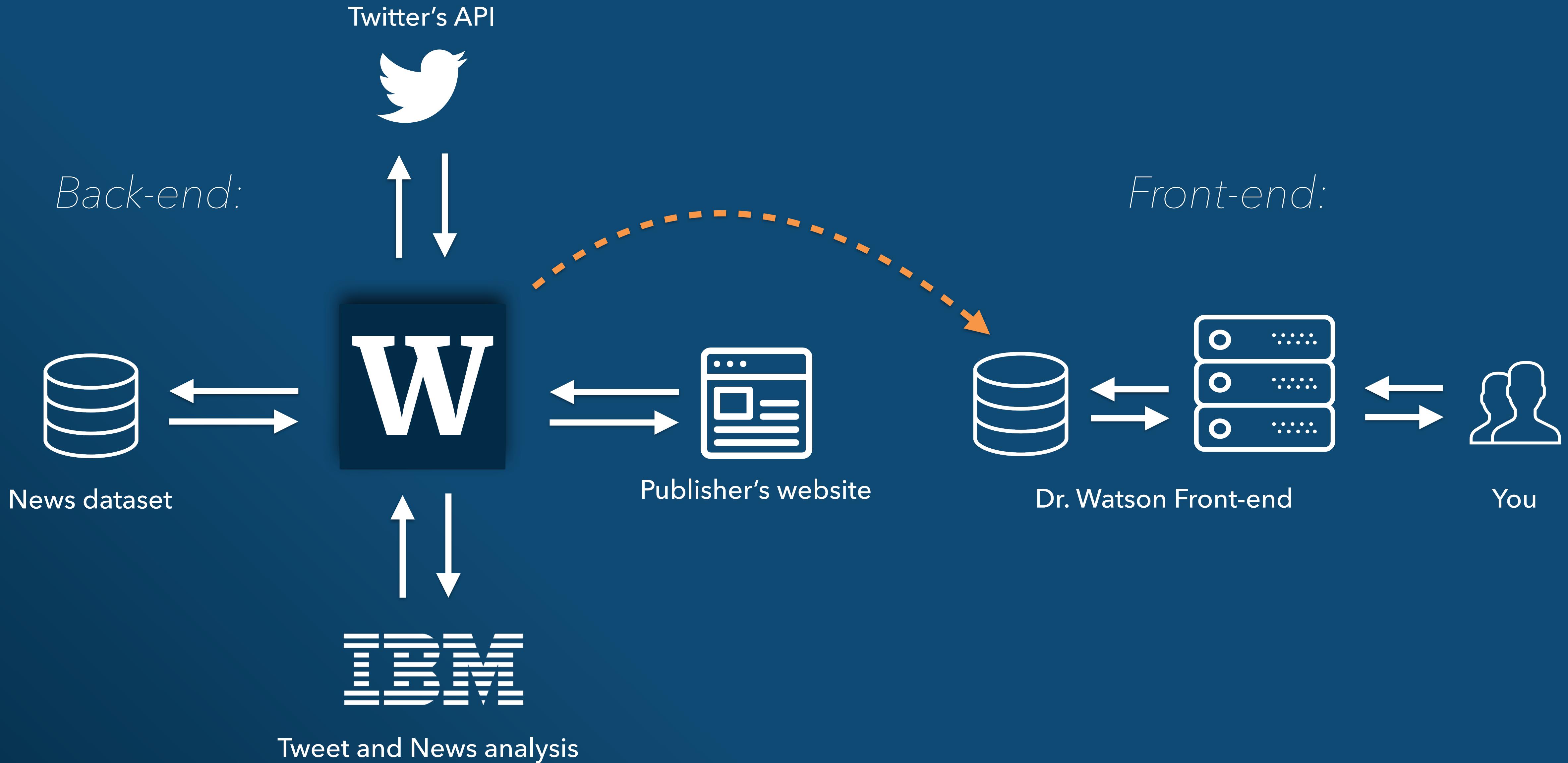
An inaccurate, sometimes sensationalist report created to gain attention, mislead, deceive or damage a reputation



We created an ensemble of three AI algorithms to identify tweets that potentially contain fake statements or fake news linked

Challenges

- 1 Data availability
- 2 API Limitation
- 3 Privacy Regulation
- 4 Satire or Fake News?
- 5 True article resemblance

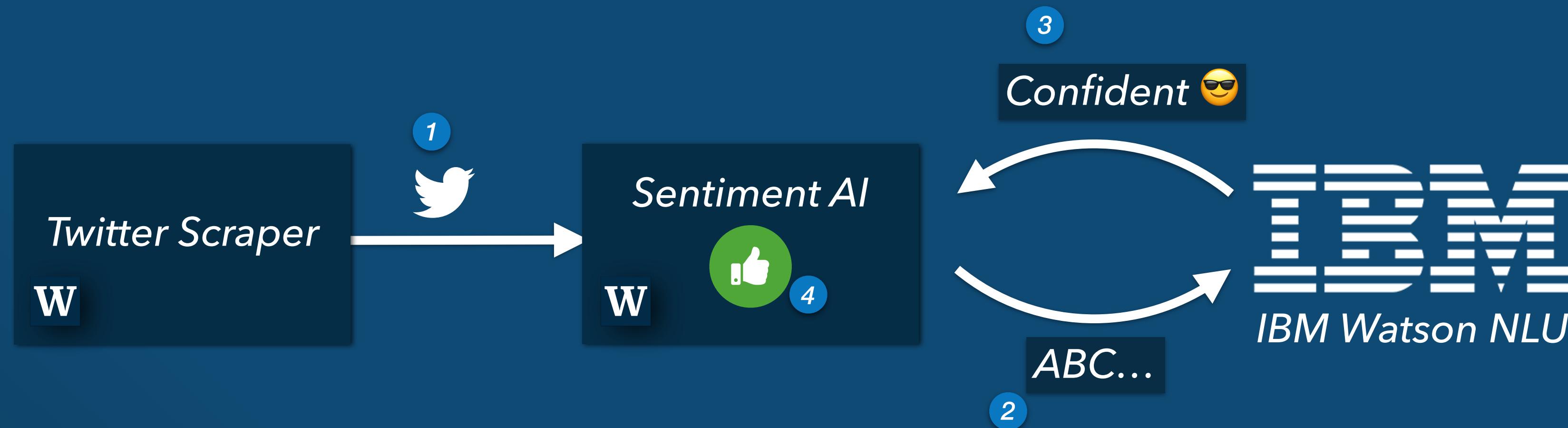


Back-end Model

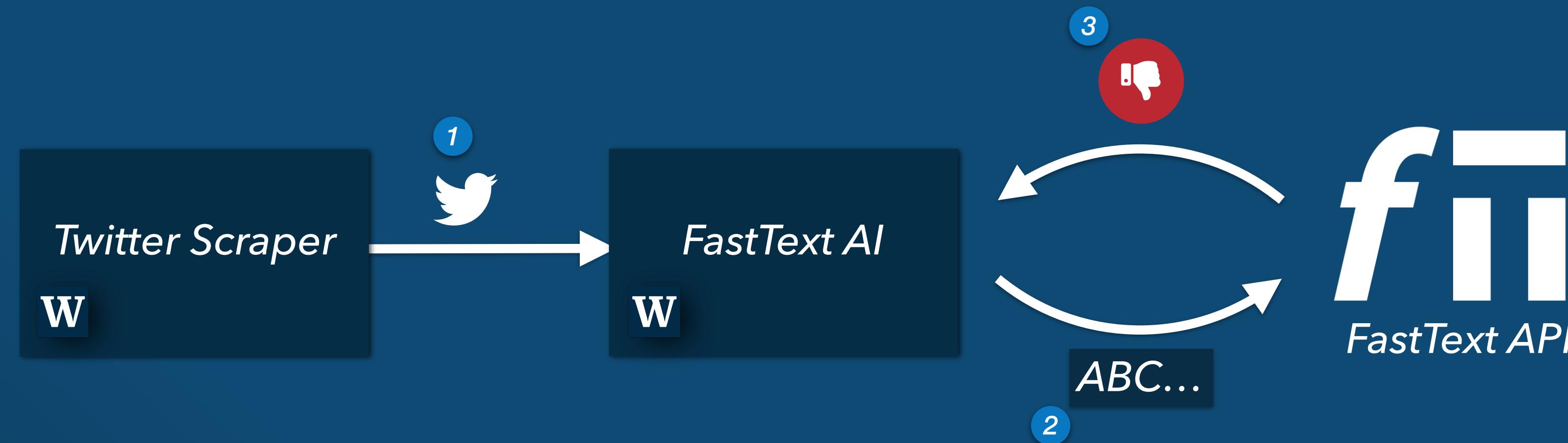
- 0 News Scraping
- 1 Sentiment Analysis
- 2 FastText Analysis
- 3 Tweet Analysis
 - 3.1 Interaction analysis
 - 3.2 Tweet's data analysis
 - 3.3 Tweet's author analysis



1. Sentiment Analysis



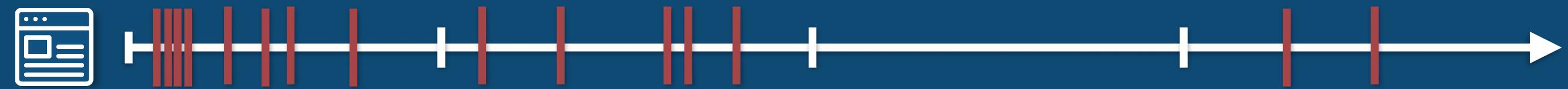
2. FastText analysis



More in depth . . .
Tweet Analysis

3. Tweet analysis

3.1 Interaction analysis

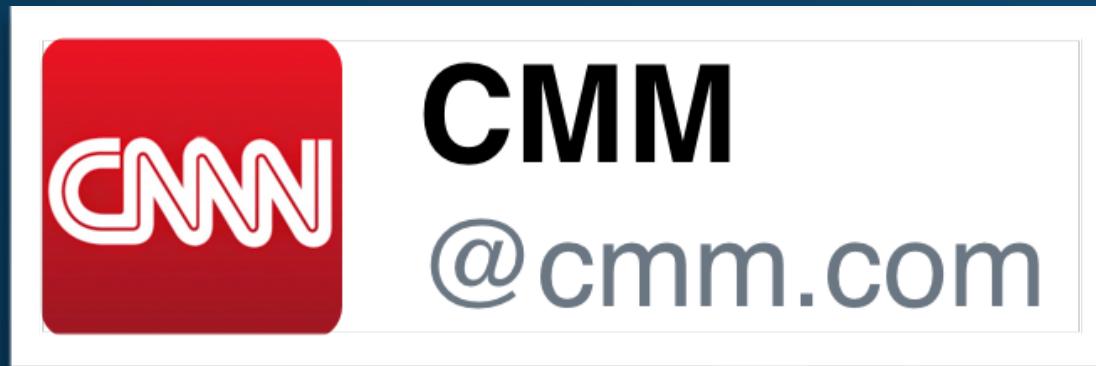


3.2 Tweet's data analysis



Homeless couple found living In Walmart **attic with hot plate, **meth** lab, and 42" **LED TV**!! **Disgraceful**!!**

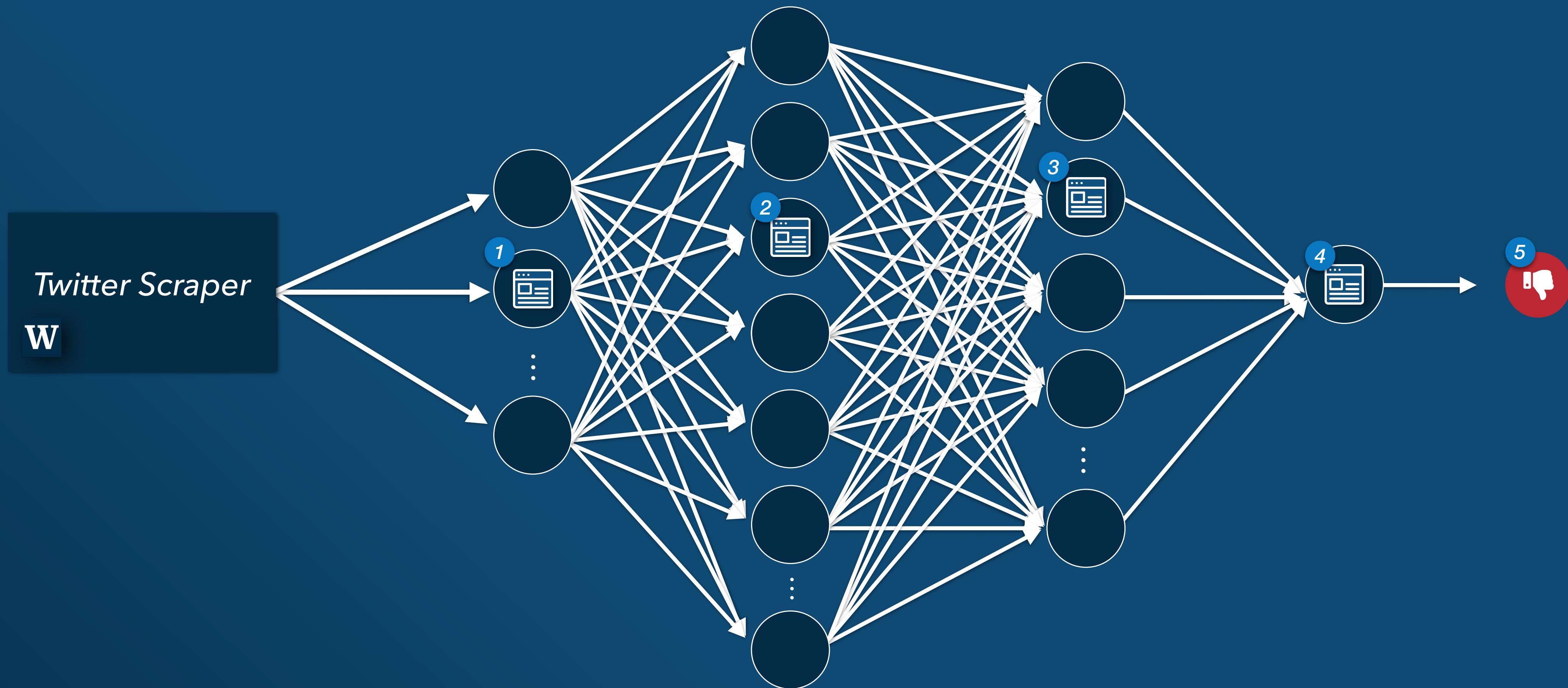
3.3 Tweet's author analysis



User: @cmm.com
Followers: 223
Verified: NO
Similar users: @Kaj86, @ReadIt, @theTruth

3.1 Interaction analysis

Through a Deep Neural Network of 27 layers



Final decision algorithm



*Two out of three algorithms classified
the tweet as hoax, thus the final remark
will be Fake News*

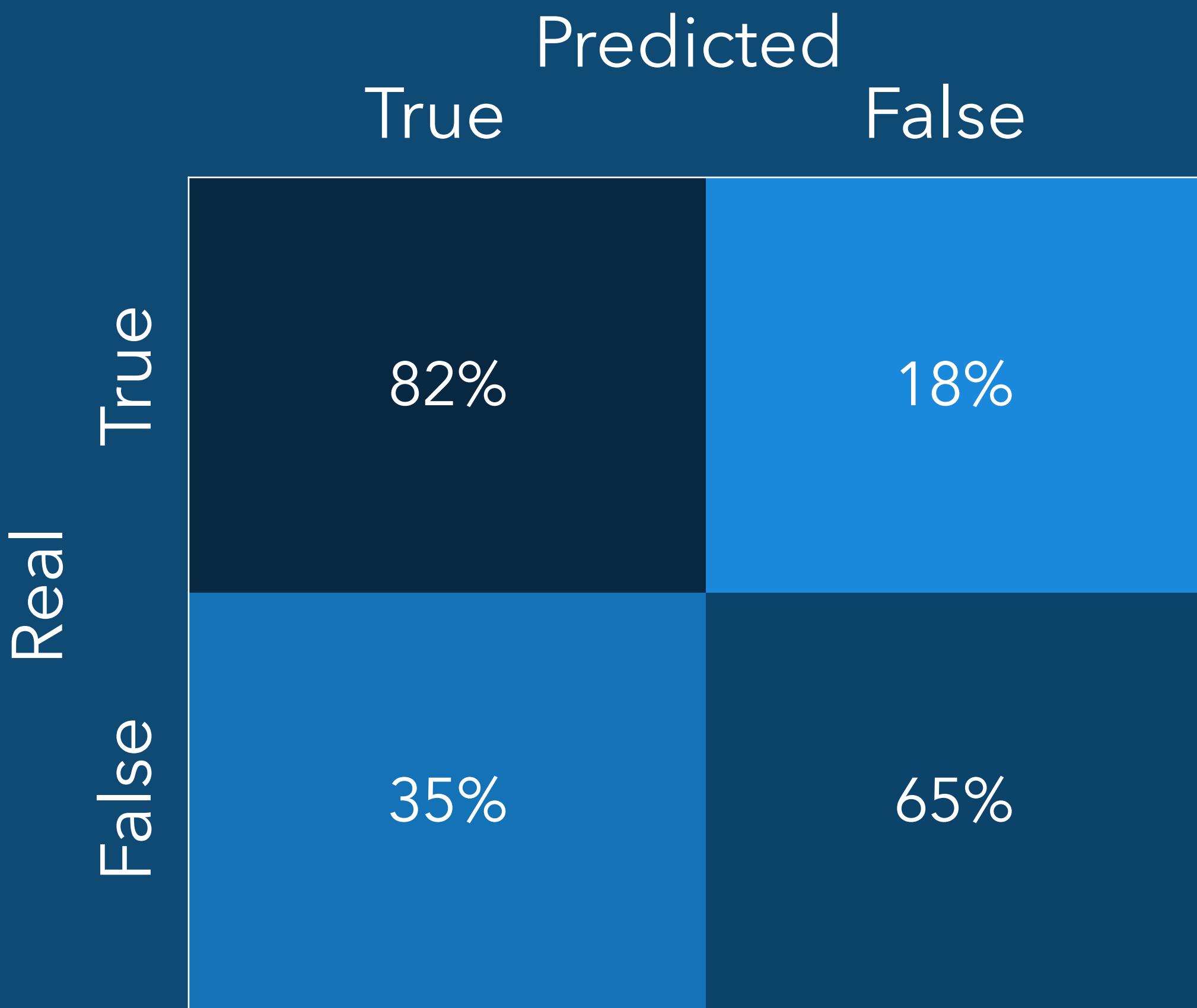
Results

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Total Accuracy: 78%

Accuracy performance:

Sentiment Analysis	69%
FastText Analysis	68%
Tweet Analysis	73%



Front-end web app

Click here: <https://fakenews-polimi.herokuapp.com/>

Our web app is also available on smartphone and tablet:





Thank you!