

Toward the Holy Grail of Automated Fact-checking

Chengkai Li University of Texas at Arlington SXSW, March 13, 2017





Enter Your Own Text



2016 U.S. Presidential Debates



Hansard: Parliament of Australia



ClaimBuster Slackbot

End-to-end Fact-checking (coming soon)

Tweets by @ClaimBusterTM



Embed

View on Twitter



ClaimBuster automated live fact-checking



2016 Third Presidential Debate Live. Oct. 19, 2016, 9 p.m. EST

Paticipants: Donald Trump, Hillary Clinton Moderators: Chris Wallace



2016 Third Presidential Debate. Oct. 19, 2016, 9 p.m. EST

Paticipants: Hillary Clinton, Donald Trump

Moderators: Chris Wallace



2016 Second Presidential Debate. Oct. 9, 2016, 9 p.m. EST

Paticipants: Hillary Clinton, Donald Trump

Moderators: Martha Raddatz, Anderson Cooper, Chris Wallace



2016 Vice Presidential Debate. Oct. 4, 2016, 9 p.m. EST

Paticipants: Tim Kaine, Mike Pence, Hillary Clinton, Donald Trump Moderators: Elaine Quijano, Martha Raddatz, Anderson Cooper



2016 First Presidential Debate, Sep. 26, 2016, 9 p.m. EST

Paticipants: Hillary Clinton, Donald Trump

Moderators: Lester Holt



2016 Democratic Party Presidential Debate, April 14, 2016, 9 p.m. EST

Paticipants: Bernard Sanders, Hillary Clinton, Donald Trump



2016 Third Presidential Debate Live. Oct. 19, 2016, 9 p.m. EST

Venue: Venue: University of Nevada, Las Vegas, Nevada. Broadcasted by: C-SPAN.

Least Check-worthy >=0.1>=0.2>=0.3>=0.4>=0.--=0.6>=0.7>=0.8>=0.9>=1.0 Most Check-worthy

Transcript

Order by Score

Chronological Order

It means their job is tougher. But they know what's going on.
They know it better than anybody. They want strong borders.
They feel we have to have strong borders. I was up in New
Hampshire the other day. The biggest complaint they have -- it's
with all of the problems going on in the world, many of the problems
caused by Hillary Clinton and by Barack Obama. All of the
problems -- the single biggest problem is heroin that pours across our
southern border. It's just pouring and destroying their youth. It's
poisoning the blood of their youth and plenty of other people. We
have to have strong borders. We have to keep the drugs out of our

④ Video



② Fact-check Report

the single biggest problem is heroin that pours across our southern border.

Similar fact-checks:

- "Heroin .. pours across our southern borders."
 Politifact True
- 2. "9:35 p.m. Trump claims heroin is "pouring" in across the southern border." <u>CBS News</u> True

Knowledge bases:

Q: What is the single biggest problem?

Wolfram|Alpha: No data returned.

Google: George Bernard Shaw Quotes. The single biggest problem in communication is the illusion that it has taken place. <u>brainyquote.com</u>

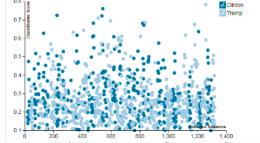
Search engine:

1. Trump says heroin pours across the southern

③ Discussion



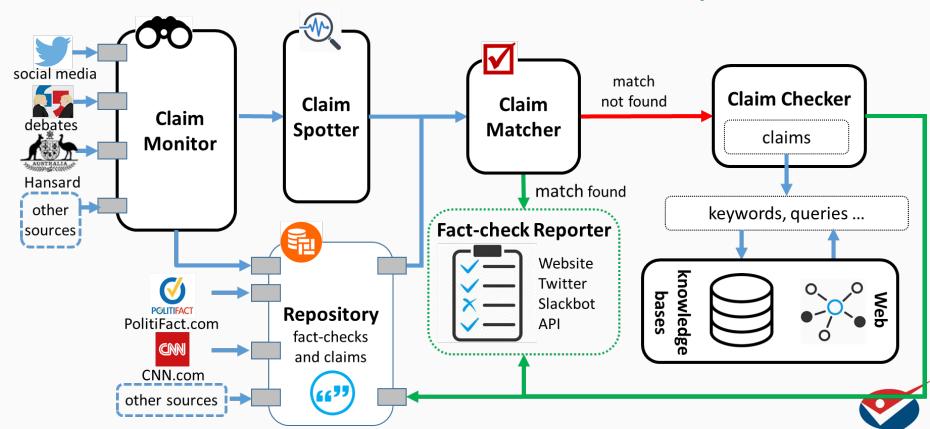
⑤ Visualization







The First-ever End-to-end System



CLAIMBUSTER



ClaimBuster APP 5:08 PM Only visible to you

Working on your request.

@gensheng

When my husband was president, we went from a \$300 billion deficit to a \$200 billion surplus and we were actually on the path to eliminating the national debt.

0.657743014341

Working on your request.

@gensheng

We know how to get control of the debt.

0.11061813488983



ClaimBuster + Slack

ClaimBuster provides a platform for you to evaluate pieces of text and identify sentences that are check-worthy. This is our first step in our long-term goal of automating fact-checking. Our Slack app allows you to score individual sentences using the /getscore claim command, create a Dropbox folder on our servers using the /createfolder e-mail command, store text files from the web into your assigned Dropbox folder for future processing on our servers using the processfile e-mail file-url command, and submit feedback to help us keep improving our services using the /claimbusterfeedback message command.



