Exact Fact

By Daniel Allex, Abhay Sheshadri, and Kevin Liu

"I think the vast majority of people, regardless of education and whatnot, really are good. So how can it be that they still do so much nasty stuff? It has everything to do with the information that we're given."

— Max Tegmark
Professor of Physics at MIT

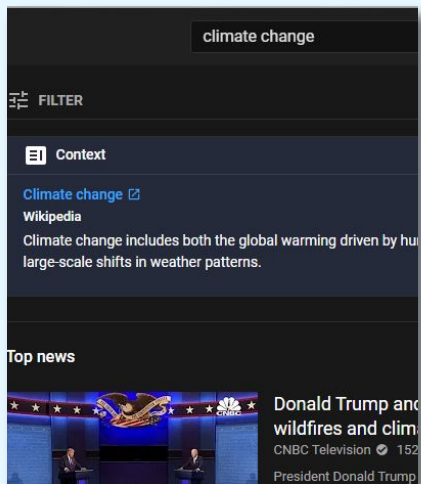# The Problem

❖ Rapid spread of misinformation on the internet has become more evident over the past decade

❖ Malicious agents can communicate to a large audience through social media

❖ It is unreasonable to expect individuals to take the time to fact-check every claim that they see
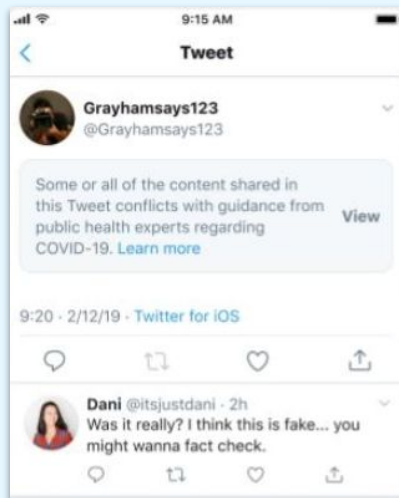
Manual Fact Checking

YouTube

Embeds wikipedia articles for controversial topics

Twitter

Actively tags posts containing misinformation

- ❖ Only on specific websites
- ❖ Done manually by humans
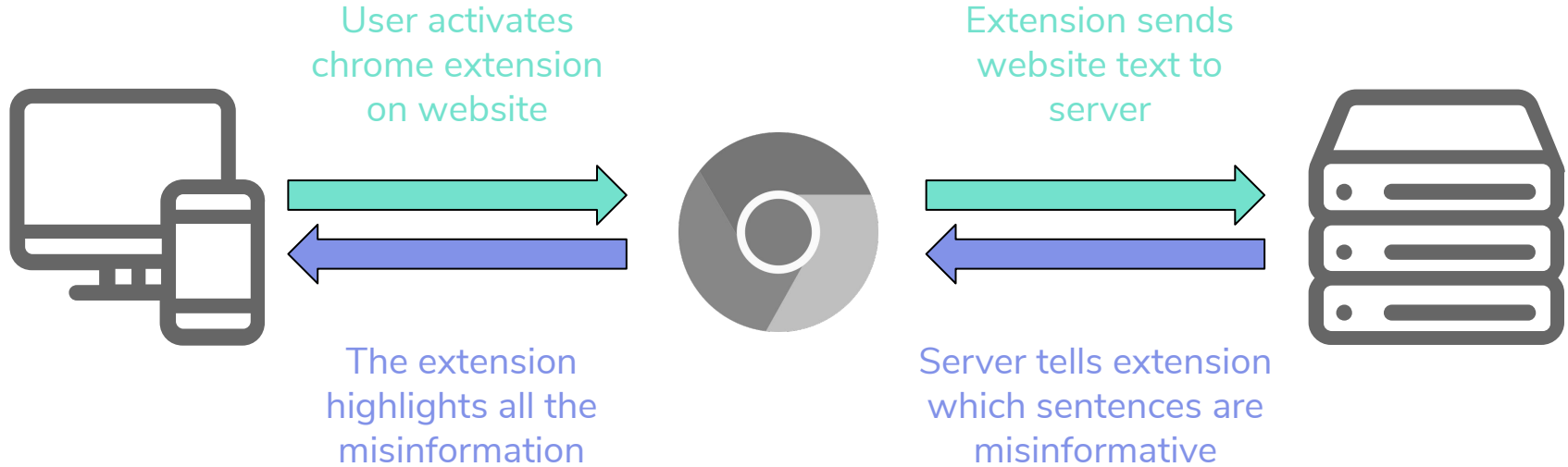- ❖ We need an automated solution for any website

The Solution

❖ Chrome extension that highlights misinformation and political bias
❖ Hovering the user's cursor over highlighted text gives:
  ➢ Suggested reason the text is incorrect
  ➢ Article / post publication date
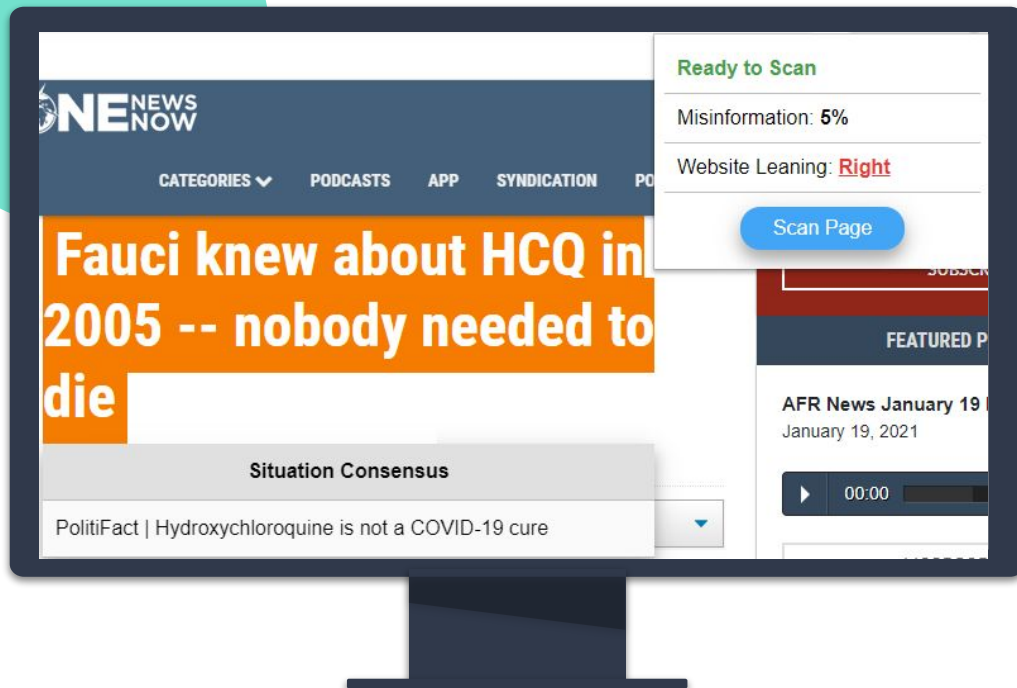❖ User can click on sources to credible articles disproving claim

How We Do It

User activates chrome extension on website

Extension sends website text to server

The extension highlights all the misinformation

Server tells extension which sentences are misinformative

The Extension

When the button is clicked, it searches the page for:
- ❖ Misinformation
- ❖ Political leaning
- ❖ Biased journalists

The Server

Sentence Splitting

Splits received data into sentences

01

Sentence Similarity

Calculates similarity between sentences from webpage and article headlines

03

02

Misinformation Matcher Algorithm

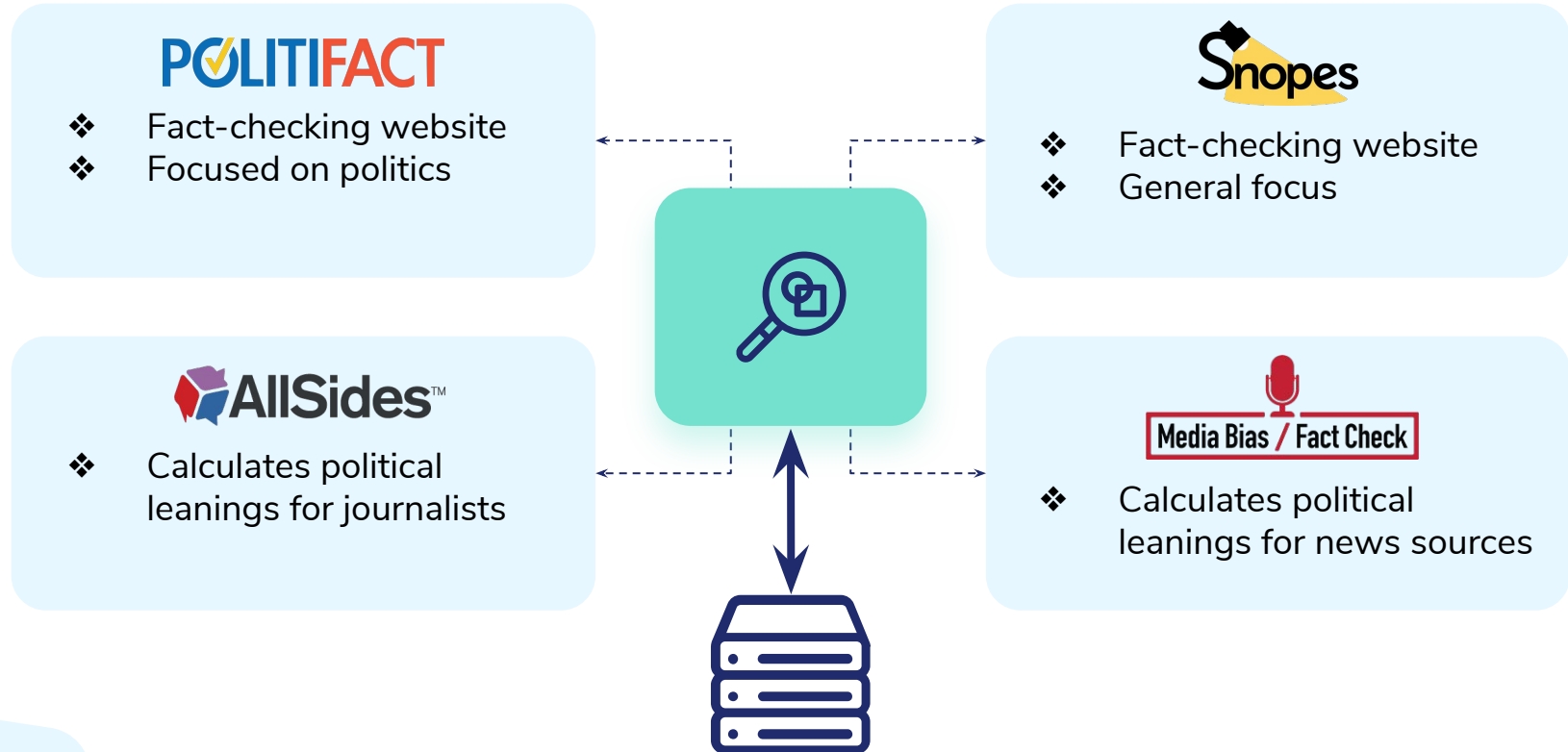Quickly compares every sentence from webpage to thousands of articles

04

Return Data

Sends misinformative sentences back to extension

Our Sources

POLITIFACT
- ❖ Fact-checking website
- ❖ Focused on politics

Snopes
- ❖ Fact-checking website
- ❖ General focus

AllSides™
- ❖ Calculates political leanings for journalists

Media Bias / Fact Check
- ❖ Calculates political leanings for news sources
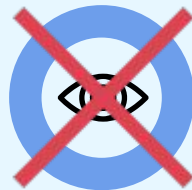
Privacy

No Data Saved

The server will never save any of your data

No Passwords

The extension will never see your password

No Spying

The extension will not run when not in use

The Truth

❖ Current consensus among authorities of a given subject

❖ Server uses Politifact and Snopes as sources of the truth

❖ Truth changes over time
  ➢ In the case that two articles contradict each other, prioritize the newer one