Design Fiction - Artificial Intelligence & the age of misinformation

Introduction

In the digital age, we are consistently exposed to misinformation that has influenced almost every aspect of our lives, it can range from an irrelevant misquote from a celebrity to misconstrued facts about a political campaign or even influence how people view & and handle a two-year global pandemic. The spread of misinformation has been a concept since humans could communicate but the in the digital age, where information can be spread quickly and to a mass amount of people, it's becoming a significant social concern that needs to be handled. Books such as 'Post-Truth' by Lee McIntyre and The 'Misinformation Age: How False Beliefs Spread' by Cailin O'Connor & James Owen Weatherall deep dive into the understanding of what you believe is dependent on what/whom you expose yourself to on online spaces & proving social media echo chambers are keeping vulnerable individuals in a loop of "alternative facts". I want to theorise about our future with projects/concepts that can prevent the crisis of misinformation & how AI can provide efficient solutions.

The Project concept

Design Fiction - An AI device/software concept to prevent the spread of digital misinformation through fact-checking that would be readily available & functional for the average person to use.

The Project - Final product

The FC.01 – Affordable device / software to fact-check information

Device Concept
The FC.01

The FC.01 will allow users to input text, images, videos recordings to test the truthfulness of the given media. using AI models, the data will be processed and will then present the users with a percentage on how factual the information is. They will also be presented with the sources the fact checkers have gotten the information from.

The FC.01 could also have real-time source checking, such as watch the news, the user could be presents with a variety of sources on a topic so that the user can see all different opinions, certain things are unable to be proven as factual.

A hardware device with AI software that would allow users to create an account so they can keep a track on every media that they have inputed. This could be a helpful feature for any professionals such as journalist who want to keep hold of the fact checkers output. The hardware device would be more for professional and companies who have to deal with fact checkers in a variety of formats & the software would be aimed at individuals.

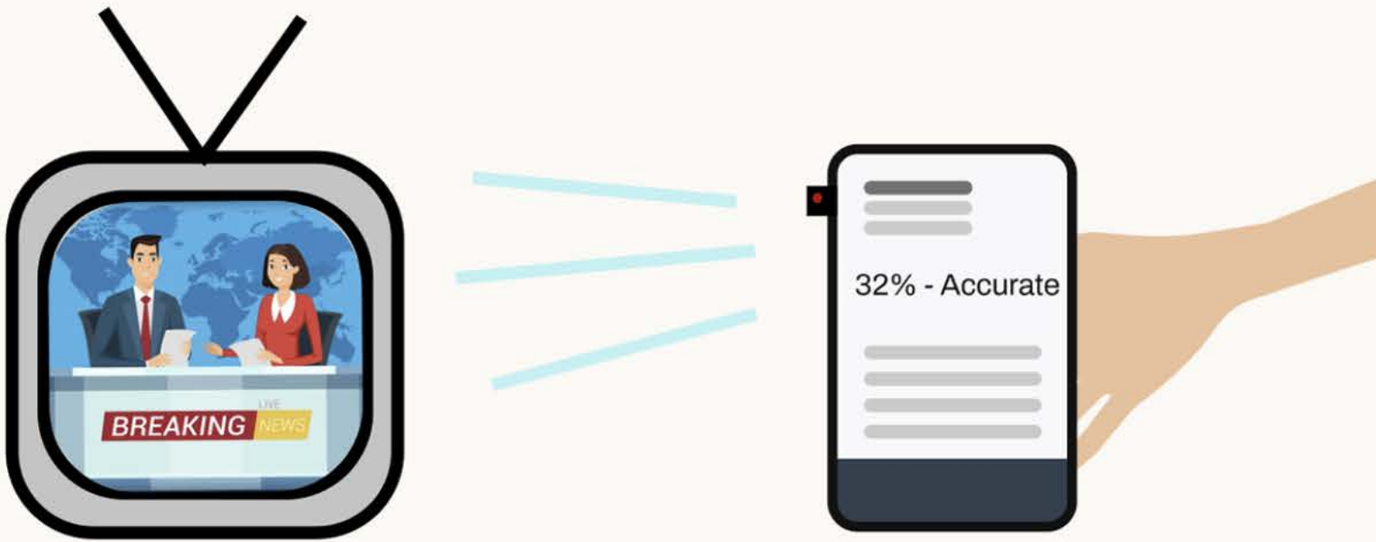
This product is aimed at the average person as well as professionals who may have to deal with reporting & require factual checks on a day to day basis. The concept is so that everyday people can be reassured that the information they are recieving is factual. Software need to be implemented without any bias to matain accuracy.

Device Concept
The FC.01

The AI Features

- Reverse engineering feature, so that images that have been altered can be reversed to their original state thus determining if the images are false.
- Cross-checking AI features, the common features of false information such as particular formats can be documented into a model & text can be cross-checked with those features to understand how reliable the text is.
- Implemented score web pages, Companies like Google are using reliability scoring to see how trustworthy the information on it is. Putting this feature in the AI model will result in quicker accuracy results.
- Context acknowledgement, with internet information context, highly matters, AI can now weigh the facts to understand the semantic meaning of articles.
- Acknowledgement keywords that might be clickbait and dog-whistling terms that might be used to generate engagement

Device Concept
The FC.01



Device Concept
The FC.01

Software features

- Allow users to input a variety of media (text, articles, images, links to web pages)
- Gives users a percentage score & about the reliability of the media.
- Provide the sources used to result in the percentage.
- Allow users to save all previous fact-checked media.
- If possiable, allow users to block the source. To decrease engagement.

Device Concept
The FC.01

Limitations

- Making a model that detects credibility is extremely difficult especially for text as there is political, cultural, social knowledge, understanding humour and satire that processing algorithms still don't have.
- Censorship, understanding that it's hard to determine who is 'right' or 'wrong' and that violations of free speech can come at hand if people's opinions are seen as unreliable and then flagged.

Get Started

FC.01

AI Software developed to fact-check & source check information

Get Started

Home

9:41

Hello, Maria

Home

Text ›

Video ›

Link ›

History

See all

Twitter - Tweet by @Je.. 35%
15 Aug 2020

NY Times - Article by Mi.. 92%
10 Aug 2020

Video Recording
5 Mar 2020

Accuracy page

9:41

Back

96%
Accuracy

Tweet By @BBCbreaking

BBC Breaking News
@BBCBreaking
Follow

France and Germany join the US and UK in advising their nationals in Libya to leave immediately bbc.in/1rVmrDJ

RETWEETS 596
FAVORITES 223

10:40 AM - 27 Jul 2014

Sources

https://www.example.org

https://www.example.org

https://www.example.org

https://www.example.org

https://www.example.org

Design Reflection - Strengths & Flaws

To conclude there were some strengths in my designs, such as successfully theorising the concept, however, I could have improved by going into a bit more details about the types of AI models/technologies that could have been implemented. Also to improve the overall design, I wanted to include a 3D CAD model of the device but wasn't able to execute it.

Documentation

Background & Research

I conducted research for the design fiction project by exploring the ways that AI is currently affecting misinformation. There are currently a few start-up companies that are trying to tackle this issue. For example, Fandango is a company that is building software to help journalists fight fake news. Their product is purely aimed at journalists and uses an AI method called content independent detection, fandango's systems can reverse-engineer changes made in photoshop and deep fakes. This differs from my concept project as these starts up are not do have developed AI algorithms to check if the content itself is making false claims. So, their content fact-checking is run by humans.

I also investigated the work of Michael Bronstein, who is a professor at the University of Lugano & Imperial College London. Who researchers in into the topic of fake news detection on social media using geometric deep learning.

Another significant project that influenced my concept design is Logically. Logically AI's algorithms use natural language processing to understand and analyse text, their algorithms check metadata & images. During one of India's election campaigns, logically analysed over 1 million articles and found 50,000 to be fake.

I also read some books that covered the topics of misinformation, and the horrendous effect can have on political campaigns, social issues and to be more specific the mishandling of the Covid-19 pandemic. 'The Reality Game: How the Next Wave of Technology Will Break the Truth' by Samuel Woolley, reviews the possible new wave of misinformation as people have come to know intentionally misleading content posing as fact-based news and how Twitter bots & trolls have influenced real-life elections, he touches on some points to avoid misinformation.