˙'VERIFIAI

Reframing our relationship with infomation

PRESENTED BY:
AIRooster

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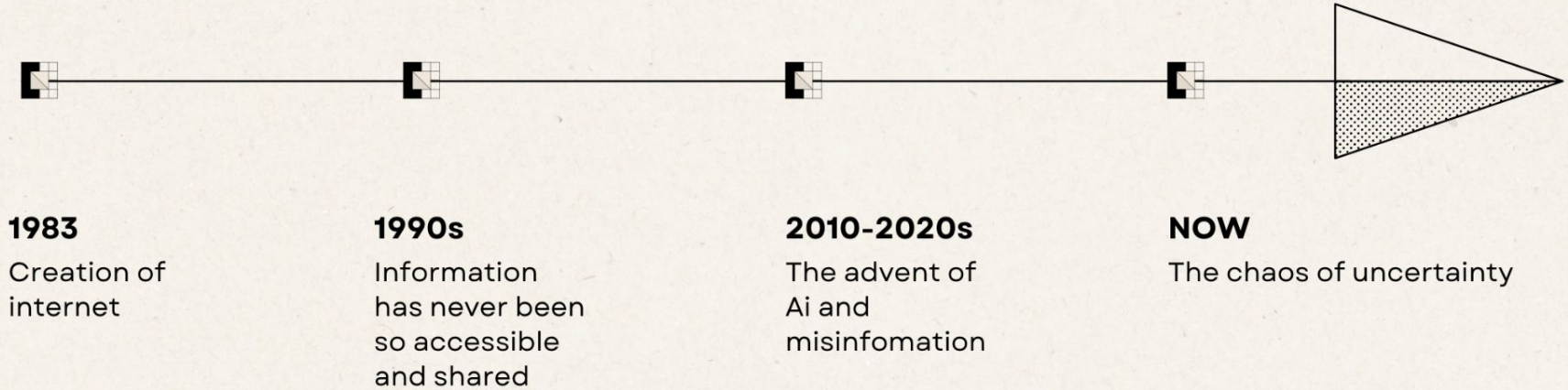Kushaan Nagpal
Kang Yu Chen

Contents

THE TIMELINE

That has lead to our present and future

1983
Creation of
internet

1990s
Information
has never been
so accessible
and shared

2010-2020s
The advent of
Ai and
misinfomation

NOW
The chaos of uncertainty

THE PROBLEM

That lies at the heart of our information-driven society

The rise of social media and AI has amplified content creation, making it harder to distinguish fact from fiction. With misinformation spreading rapidly and attention spans shrinking, there's a growing need for quick, efficient fact-checking solutions.

Misinformation   Fake News
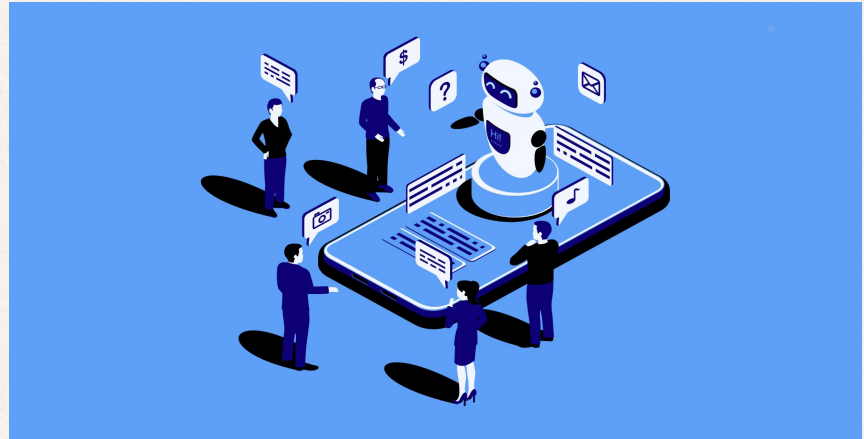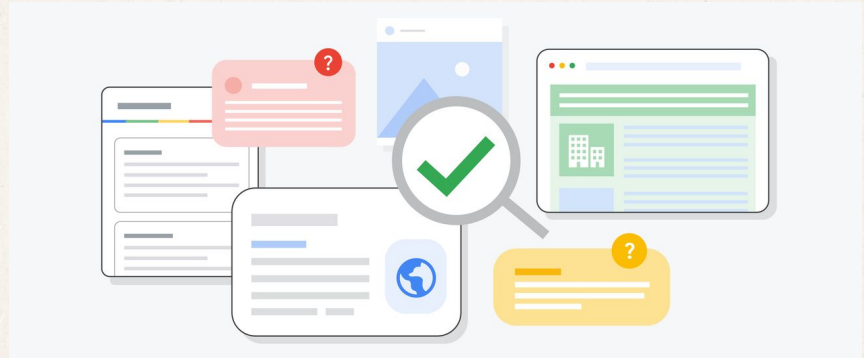
Competition

Fact Checking Sites

Too disruptive, takes user away from their current focus

GenAI tools/ Search Engines

Too time consuming, require manual research

Human Analysis

Too complex, require users to read and decipher the truth by themselves

Our Solution: VerifiAI

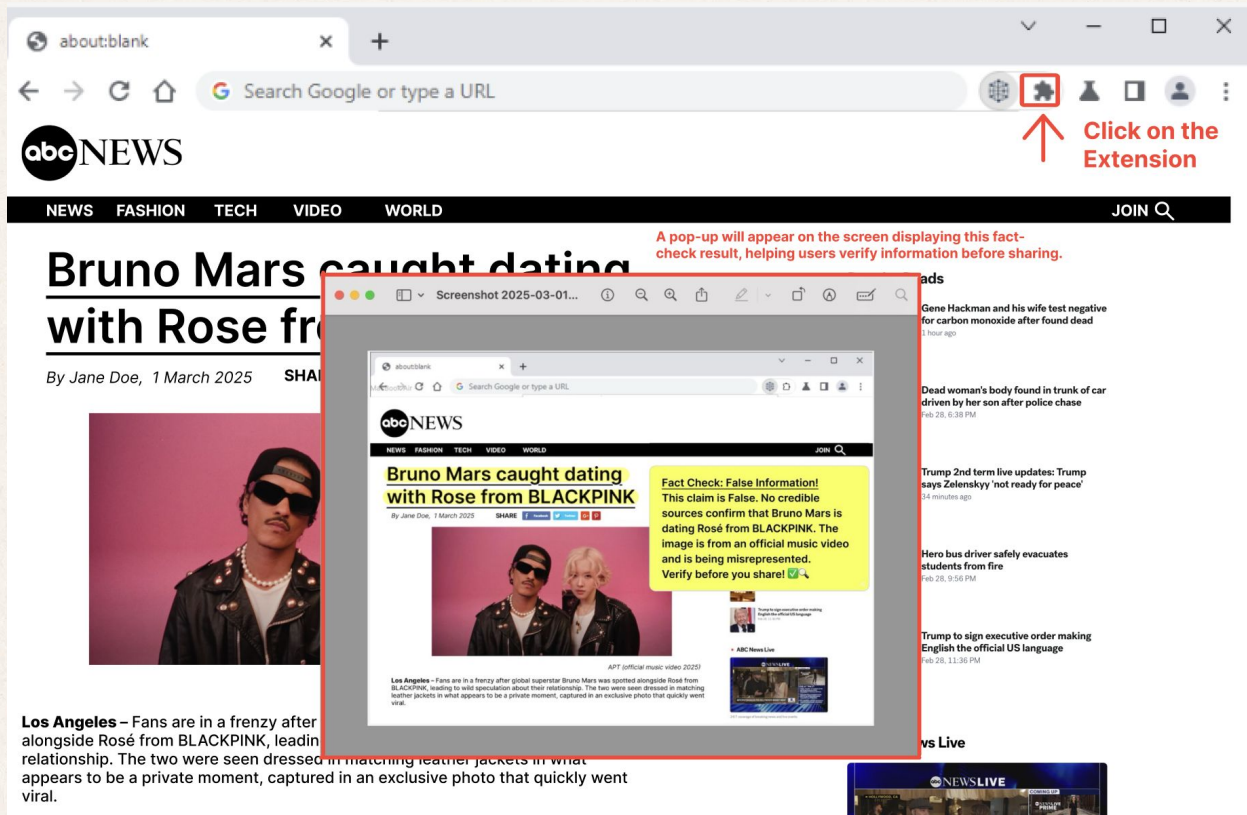Quick and easily processing of data just by taking a single screenshot using our extension

Click on the Extension

A pop-up will appear on the screen displaying this fact-check result, helping users verify information before sharing.

Step # 1

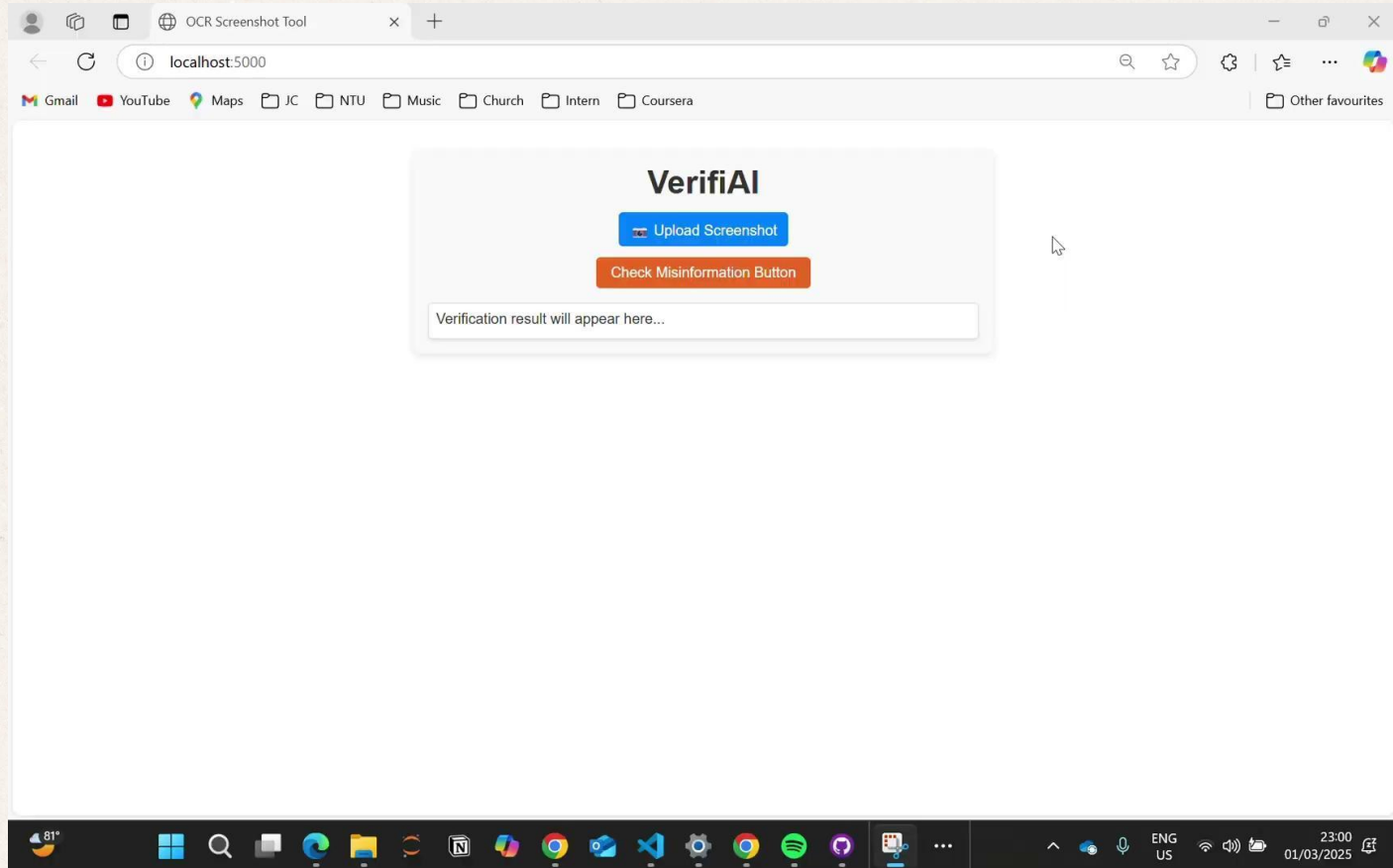User clicks on chrome extension

Step # 2

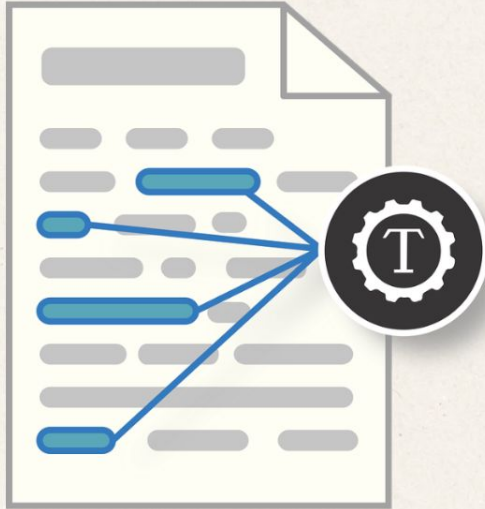Extension takes a screenshot, and extracts text from screenshot image

Step # 3

The text is fact-checked with sources and explained to user

Our Prototype

Text Extraction

Tesseract:
open-source Optical Character Recognition (OCR)
engine

Takes an image—such as a scanned document, a photograph of a sign, or any other picture containing text—and extracts the text from it. The result is machine-readable text that can be edited, searched, or processed further.

Truth Determination
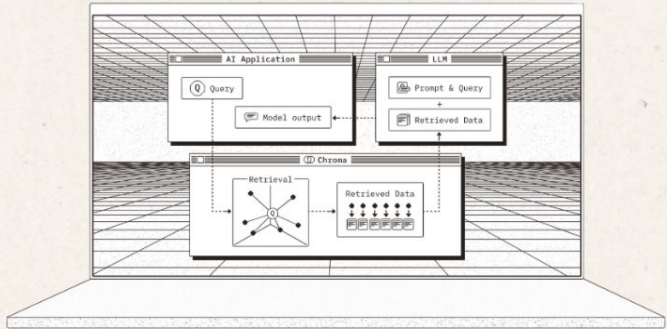

RAG (Retrieval-Augmented Generation)

Enhances language models by retrieving relevant information from external sources before generating a response.

Chroma

Converts text into embeddings for similarity search using a vector database

Google's Fact Check Tools API

API is used to get real-world fact-check information.

Constraints

Chrome Manifest V3 CSP

Updated Content Security Policy as part of manifest V3

- Prevented us from using 3rd party APIs and objects

- Were unable to implement our solution on a extension currently

- Temporary compromise: reflected the features using a webpage instead

Impacts

✅ **Combating Misinformation** – Provides real-time fact-checking to curb fake news, safeguarding social harmony, especially in Singapore's multicultural landscape, where misinformation has been used to incite unrest.

✅**Promoting Digital Literacy**: Encourages users to verify information before believing or sharing it, strengthening digital literacy beyond just our stated features.

✅ **Time-Saving**: Eliminates the need for manual fact-checking, providing instant verification that fits the short attention spans of the average internet user

✅ **Encouraging Responsible Content Sharing**: Users can confidently share accurate information, reducing the spread of misinformation.

✅ **Innovative AI Integration:** Combines OCR, RAG models, and real-time fact-checking APIs for a comprehensive verification process

Tech Stacks Used

- HTML, CSS, JavaScript, Python, LangChain