

Utilising Blockchain with Multi-Detection A.I. to fight Hoaxes of the Internet

SCAM BUSTERS





Opportunity

We live in an age labeled as the "Information Age," where we are constantly fed with a massive volume of information.

However, the sad truth is that misinformation has plagued the World Wide Web and flooded it with countless threats to the average Internet User, such as <u>false news</u>, <u>scams</u>, and <u>phishing attacks</u> that pose as harmless pieces of the web.

Internet users need an <u>affordable</u>, <u>easy-to-use</u>, and reliable detection tool to <u>maximize their security</u> against these digital risks

Technologies

Enabling Technologies

Decentralised Al:

Bittensor: A peer-to-peer network for decentralised Al training and inference [6]

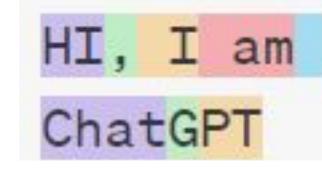
Development Milestones

Higher capacity blockchain

More advanced learning models, capable of multi-functionality

Text:

Fine-grained Hallucination Detection and Editing (FAVA): For hallucinations detection Binoculars: Detect Al generated text paper RAG: Real time Retrieval Augmented Generation

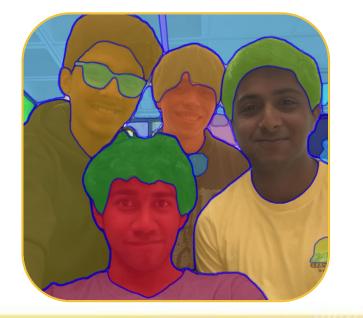


Videos and Images:

SAM: Segment anything model [5]
SDXL Detector: Stable diffusion

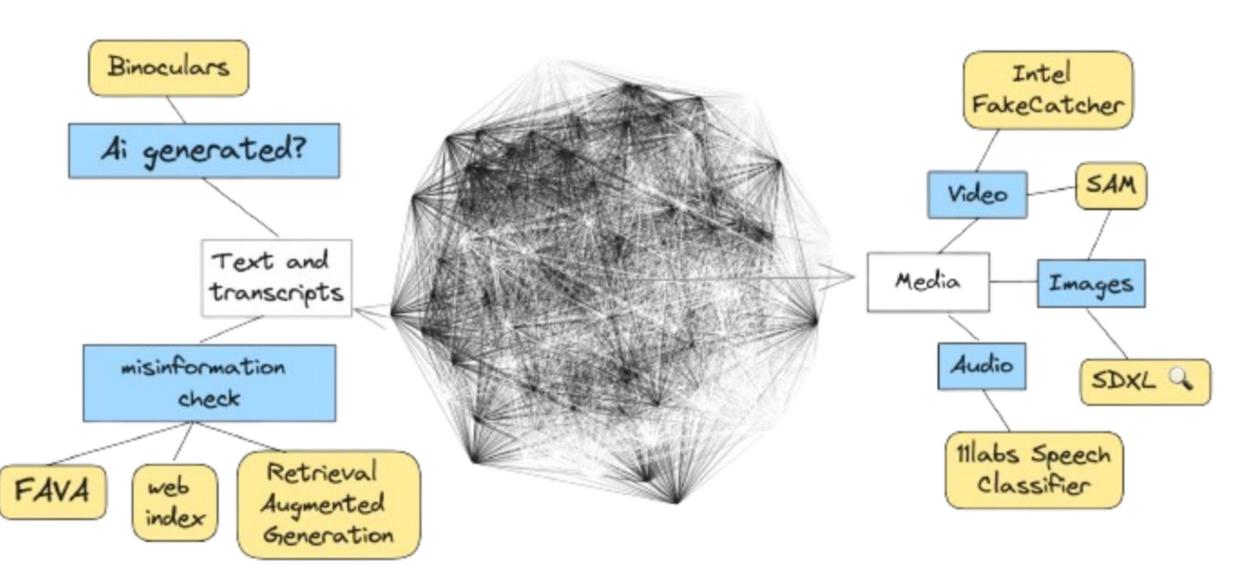
image detector [4]





Solution

- A blockchain network (peer-to-peer) that allows for the decentralized use of Artificial Intelligence.
- Using the network as a tool to detect various forms of scams and misinformation sources: texts, images, and videos (Deepfake generated).
- All content is verified and stored in the ledger to maximise use of compute
- Conditional Computation: Peers learn through gradient descent how to select and prune neighbors in the network



Neural Network of computers on Bittensor

Who is interested?

Target Customer

- Internet Users from all ages
- Public Figures (celebrities and politicians)

Stakeholders

- Social Media Companies (Facebook, Twitter/X, WhatsApp)
- Public Magazines and Nsew Channels

Societal Challenges

Trust and Adoption - The peer-to-peer functioning of the Al model requires trust among users for its success.

Erroneous programming instructions or data bias can prevent trustworthiness from building up [1]

Cost of Implementation - Estimated cost of implementing blockchain apps ranges from \$4,000 up to \$400,000 [2]

Societal Impacts

Positive Impact

Enhancing **Trust** and **Transparency** among users.

Prevention of Misinformation on a Large Scale [3]

Negative Impact

Energy consumption of the blockchain

Concerns about the privacy of end-to-end encryption messaging.

References

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- [3] P. Akhtar et al., "Detecting fake news and disinformation using artificial intelligence and machine learning to avoid supply chain disruptions," Annals of Operations Research, Nov. 2022
- [4] M. Maybe "Organika/sdxl-detector · Hugging Face," huggingface.co. https://huggingface.co/Organika/sdxl-detector (accessed Mar. 02, 2024).
- [5] A. Kirillov et al., "Segment Anything," Apr. 2023. Available: https://arxiv.org/pdf/2304.02643.pdf
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