

### The Dream: Al that works

- Chatbots that do something useful.
- Machine learning and Large Language Models. (autocomplete on steroids)

- They depend on access to oceans of data
- Who has access to that data?
- And the processing power. Google, Microsoft, Oracle, etc.

## Trouble in Paradise

Many do not have access to large data sets.

Cloud systems "own" the data.

Hallucinations

And ChatGTP can produce perfect fakes!

## Why Is This Important?

- Trust in the digital world is critical to society, to democracy and to the economy
- Generative AI threatens all of this because of its ability to create deep fakes
- Today, there is no infrastructure to verify where content originated
- What we've done: defined and prototyped such an infrastructure:
  - A content ownership credential linking creators and content, that uses existing Internet digital signatures, secure hashing, PKI and certificates
  - A Registration Authority for generating credentials
  - A universal browser extension that does content ownership verification

#### **BALENCIAGA**



# Hallucinations and Emergence

Semantic networks

