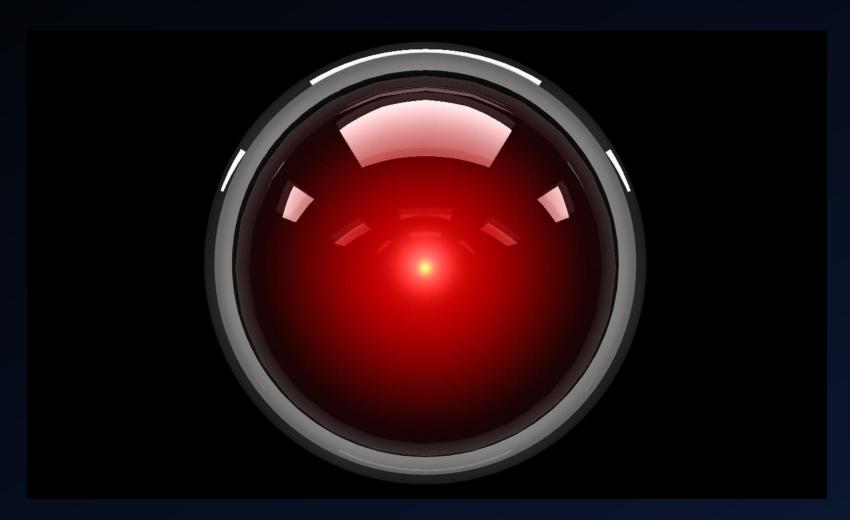
Banking on Al

Arthur C. Clarke
2001 Space Odyssey
(1968)



Douglas Adams *The Hitchhiker's Guide to the Galaxy* (1979)



Marvin the paranoid android

Al with a conscious (although very bleak)

Alan Turing
Computing Machinery and Intelligence
(1950)



Considered to be the father of theoretical computer science and artificial intelligence.

"If a machine is expected to be infallible, it cannot also be intelligent."

— Alan Turing

Agenda

- What is Al
- DIKW (Sometimes DIKUW)
- Legislation
- The Use of Al now
- Deployment
- Large Language Models
- How is it really being used now

What is Al

Narrow AI vs. General AI:

- Narrow AI: AI systems today are "narrow" or "specific" AI, designed to perform specific tasks or solve particular problems (e.g., chatbots, fraud detection). These systems excel at their designated functions but lack general understanding or adaptability outside their programmed scope.
- General AI: General AI, also known as artificial general intelligence (AGI), would have the ability to understand, learn, and apply intelligence across a wide range of tasks similar to human cognition. This level of AI does not yet exist and is the subject of ongoing research and debate.



With the U









How we have been researching the data.



Just scratching the surfaces on this stage.

How we have been researching the data.



Nowhere near having anything remotely capable

Just scratching the surfaces on this stage.

How we have been researching the data.

Legislation

SB1047

The Safe and Secure Innovation for Frontier Artificial Intelligence Models Act, or SB 1047, is a 2024 California bill intended to "mitigate" the risk of catastrophic harms from AI models so advanced that they are not yet known to exist". Specifically, the bill would apply to models which cost more than \$100 million to train and were trained using a quantity of computing power greater than 1026 integer or floating-point operations.SB 1047 would apply to all AI companies doing business in California—the location of the company does not matter. The bill creates protections for whistleblowers and requires developers to perform risk assessments of their models prior to release, under the supervision of the Government Operations Agency. It would also establish CalCompute, a University of California public cloud computing cluster for startups, researchers and community groups.

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This bill would require a person that operates a computing cluster, as defined, to implement written policies and procedures to do certain things when a customer utilizes compute resources that would be sufficient to train a covered model, including assess whether a prospective customer intends to utilize the computing cluster to train a covered model.

This bill would authorize the Attorney General to bring a civil action, as provided.

The bill would also provide for whistleblower protections, including by prohibiting a developer of a covered model or a contractor or subcontractor of the developer from preventing an employee from disclosing information, or retaliating against an employee for disclosing information, to the Attorney General or Labor Commissioner if the employee has reasonable cause to believe the information indicates the developer is out of compliance with certain requirements or that the covered model poses an unreasonable risk of critical harm.



Newsom Vetoed the Bill

September 29,2024

Newsom Vetoed the Bill

Newsom suggested the bill's specific interest in model size was misplaced. "By focusing only on the most expensive and large-scale models, SB-1047 establishes a regulatory framework that could give the public a false sense of security about controlling this fast-moving technology," Newsom wrote. "Smaller, specialized models may emerge as equally or even more dangerous than the models targeted by SB-1047—at the potential expense of curtailing the very innovation that fuels advancement in favor of the public good."

So how is "Al" being used now?

How its used now

•Enhanced customer service through AI-driven chatbots and virtual assistants.

•Fraud detection and prevention using AI algorithms to analyze transaction data.

Risk assessment and credit scoring.

How its used now

Regulatory Compliance

•Customer or Market Analytics acrost multiple platforms including systems outside of the Bank.

Summarizing Audits/Reports

Al Deployment Models

Taking a developed AI model and integrating it into a real-world application or system.

The Problem

Model compatibility with existing infrastructure and systems.

Protecting sensitive data and preventing unauthorized access

Scalability challenges

Cloud-Based Platforms

On-Premise/On-Site Deployment

Edge Computing

Cloud-Based Platforms

Amazon Web Services (AWS), Google Cloud Platform (GCP) and Microsoft Azure, offer a scalable and flexible infrastructure for Al model deployment. However, it is important to evaluate whether you have sufficient control over the underlying Al models

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greater control over the infrastructure and data, but it requires significant upfront investment

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Edge Computing

limited computational resources and potential security risks

LLM LARGE LANGUAGE MODELS

- A type of computational model designed for natural language processing tasks such as language generation.
- As language models, LLMs acquire these abilities by learning statistical relationships from vast amounts of text during a selfsupervised and semisupervised training process

LLM LARGE LANGUAGE MODELS

There are lots of them and more are getting released daily

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- As language models, LLMs acquire these abilities by learning statistical relationships from vast amounts of text during a selfsupervised and semisupervised training process

Define what you will be using it for.

What will you allow it access to.

DEPLOYING AI

Know where your data is and how its classified

Retaining every question and answer. (full Logging)

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DEPLOYING AI

Think Small
Think Big

So How is it really being used now!!! To commit fraud

Phishing Emails

Text to Speech Interpreters

Phishing Emails

Don't see much form the Nigerian Prince anymore (I guess he is ok now)

Very realistic with proper phrasing of sentences. (They use AI translators to generate)

Text to Speech

Used in scam calls, will take the actual voice of victim's relatives (usually from social Media) on phone scams.

Language Translators

Starting to see it with Wire and ACH call back verifications at Banks.

CONSULTING GROUP



Questions?

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