Actually intelligent AI
A change in perspective

James Guszcza, FCAS, PhD
NAIC
October 21, 2025

AI is …

AI is *the new electricity*.

— Andrew Ng

AI is *an ideology*, not a technology.

— Jaron Lanier and Glen Weyl

AI is an ideology, not a technology

> OpenAI's mission is to ensure that artificial general intelligence (AGI)—by which we mean highly autonomous systems that outperform humans at most economically valuable work—benefits all of humanity.

The company's mission statement was "solve intelligence", and then use it to solve everything else

GOOGLE SAYS IT'S CLOSING IN ON HUMAN-LEVEL ARTIFICIAL INTELLIGENCE

"THE GAME IS OVER!"

TECH · A.I.

DeepMind co-founder Mustafa Suleyman warns AI is a 'fundamentally labor replacing' tool over the long term

BY WILL DANIEL
January 17, 2024 at 11:27 PM GMT+1

The slovenliness of our language makes it easier to have foolish thoughts.

— George Orwell

Exclusive: Anthropic warns fully AI employees are a year away

Google Engineer Claims AI Chatbot Is Sentient

If A.I. Systems Become Conscious, Should They Have Rights?

As artificial intelligence systems become smarter, one A.I. company is trying to figure out what to do if they become conscious.

By Kevin Roose
Reporting from San Francisco

April 24, 2025

we are going to find "that we have not merely birthed a new tool, but a new species — the superintelligent machine."

OPINION
THOMAS L. FRIEDMAN

The One Danger That Should Unite the U.S. and China

A change in perspective is worth 80 IQ points.

— Alan Kay

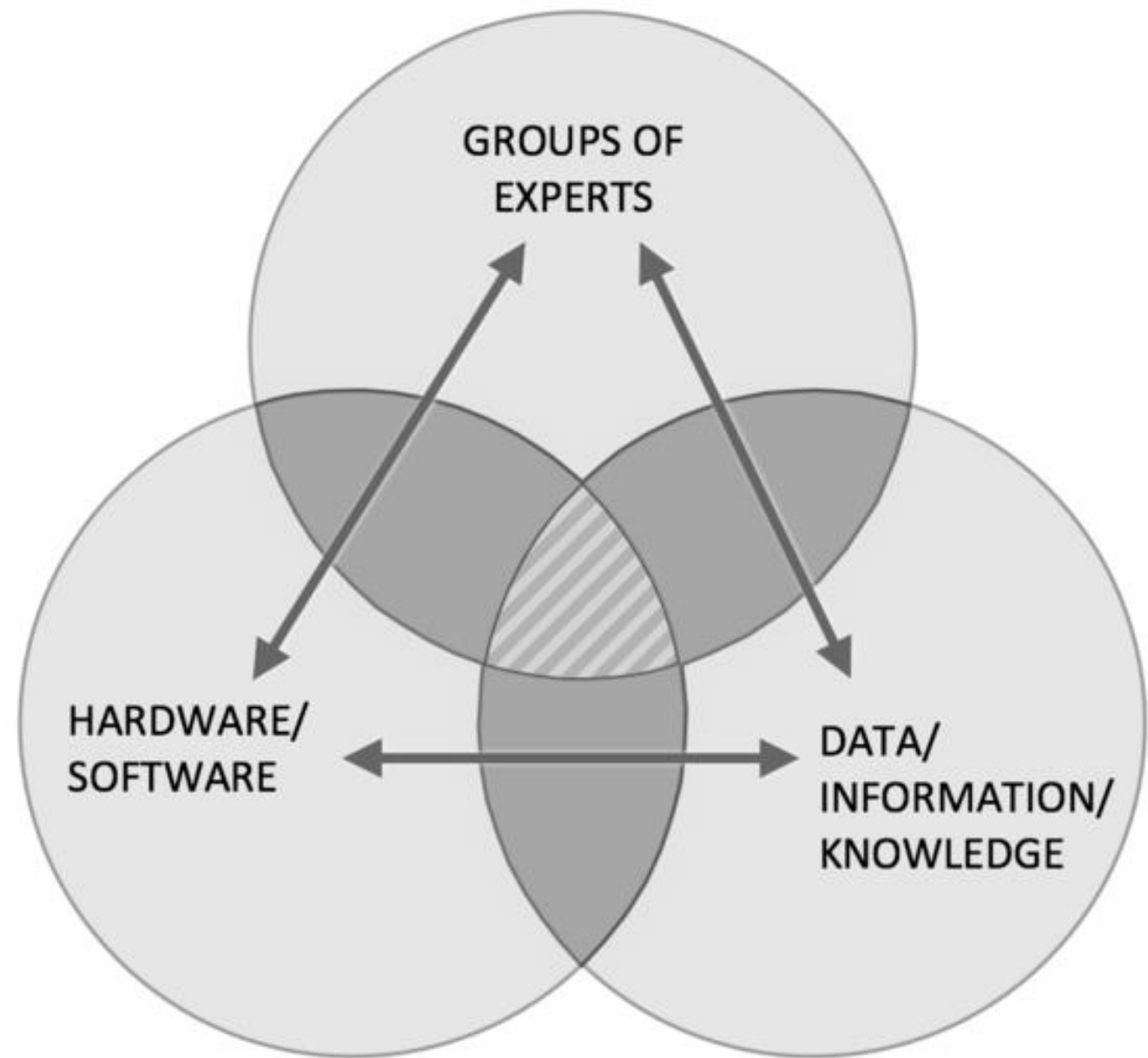THE LOGIC THEORY MACHINE
A COMPLEX INFORMATION PROCESSING SYSTEM

by

Allen Newell and Herbert A. Simon

P-868

June 15, 1956

GROUPS OF EXPERTS

HARDWARE/ SOFTWARE

DATA/ INFORMATION/ KNOWLEDGE

COLLECTIVE INTELLIGENCE

# Where is the intelligence in this story?

Their skill at manipulating and "coaching" their computers to look very deeply into positions effectively counteracted the superior chess understanding of their grandmaster opponents and the greater computational power of other participants.

Weak human + machine + better process was superior to a strong computer alone and, more remarkably, superior to a strong human + machine + inferior process.

— *Garry Kasparov, NYRB 2010*

And the winners are….: Zack Stephen and Steven Cramton
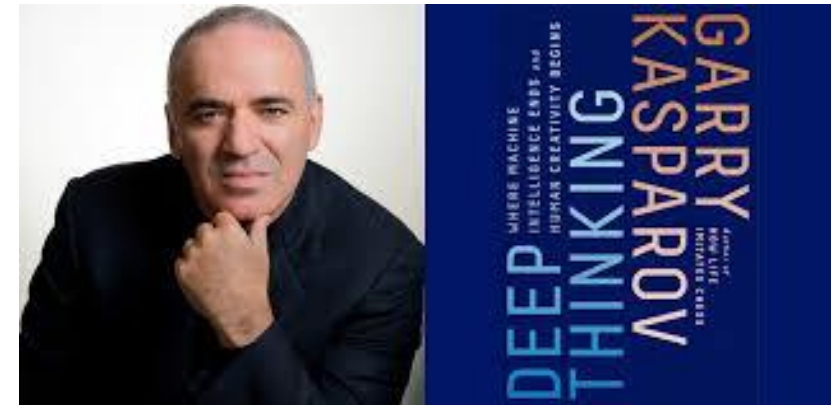
System-level intelligence is a design challenge

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— Garry Kasparov

Hybrid Intelligence is about more than optimizing algorithms.

It is about "optimizing" processes of **human-machine collaboration**.

Statistics and computer science provides an incomplete scientific framework.

Also needed: Ideas from ethics, psychology, human-centered design, behavioral economics, …

"Artificial stupidity"

Death by GPS

From Wikipedia, the free encyclopedia

Death by GPS refers to the death of people attributable, in part, to following GPS directions or GPS maps.[1][2][3] Death by GPS has been noted in several deaths in Death Valley, California,[4][5] a lost hiker at Joshua Tree National Park in southeastern California,[6] and incidents in Washington State, Australia, England, Italy and Brazil.

Tesla says driver ignored warnings from Autopilot in fatal California crash

Google Maps Official Booked After GPS Error Leads To Death Of Three In Bareilly, UP

Four engineers of the Public Works Department (PWD) and a Google Maps official have been booked in connection with the death of three men who were in a car that fell from an under-construction bridge while following directions on the navigation app.

Sahil Kukreja   Updated Nov 26, 2024, 10:47 AM IST

"Artificial stupidity"

New York lawyers sanctioned for using fake ChatGPT cases in legal brief

By **Sara Merken**

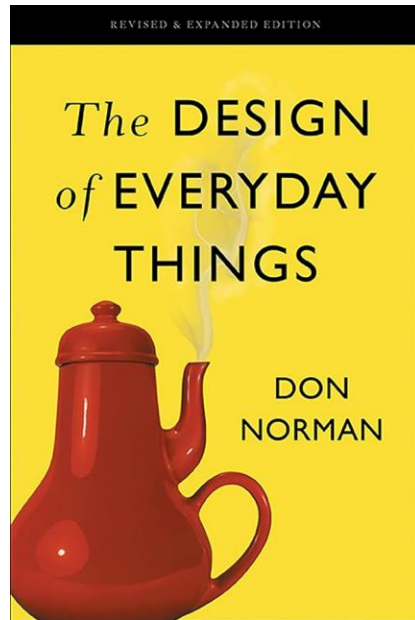June 26, 2023 1:28 AM PDT · Updated 2 years ago

Judge Blasts Stanford AI Expert's Credibility Over Fake, AI-Created Sources

In December, professor Jeff Hancock admitted in a court filing that he had used ChatGPT, blamed the bot for an error and two other AI "hallucinations" he had subsequently discovered in his submission, and apologized to the court.

January 16, 2025 • Tribune News Service

We must design for the way people behave, not for how we wish them to behave.

— Don Norman

REVISED & EXPANDED EDITION

The DESIGN of EVERYDAY THINGS

DON NORMAN

THX FOR THE PULLING HANDLES
AND YOUR INSTRUCTIONS TO BE PUSHING THEM

Computers are like a bicycle
for our minds.
— Steve Jobs

An overdue field:
Hybrid intelligence systems design

A needed paradigm shift
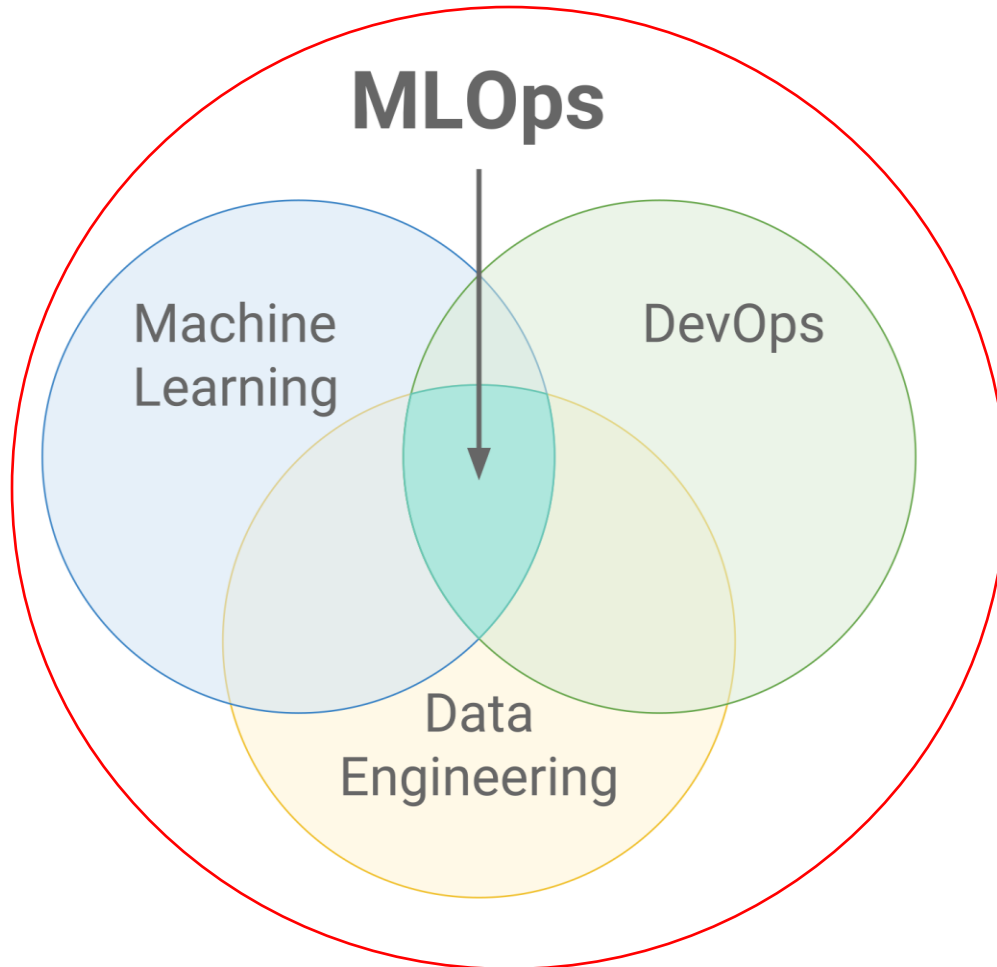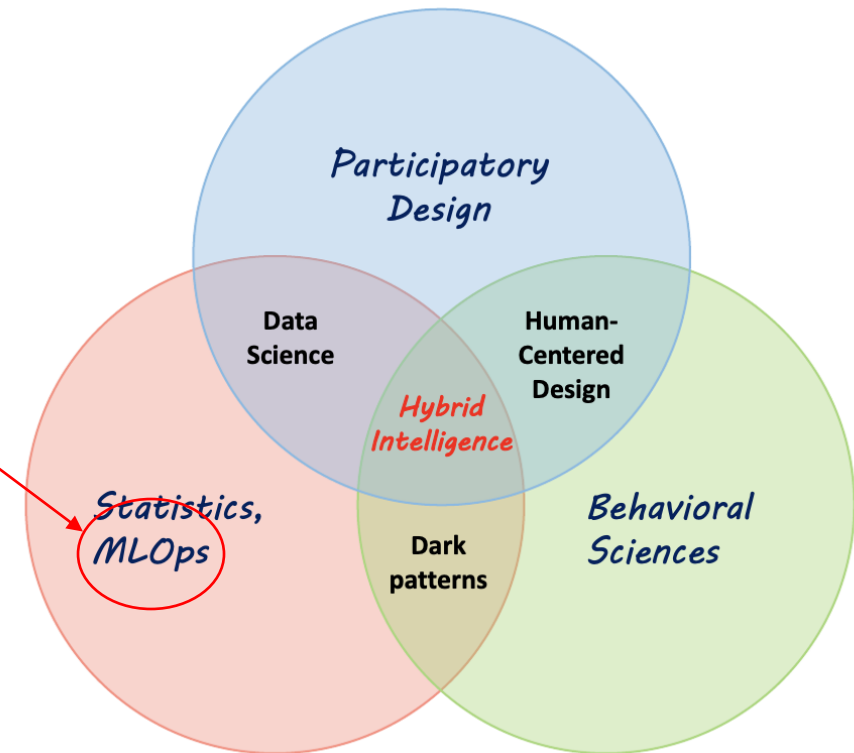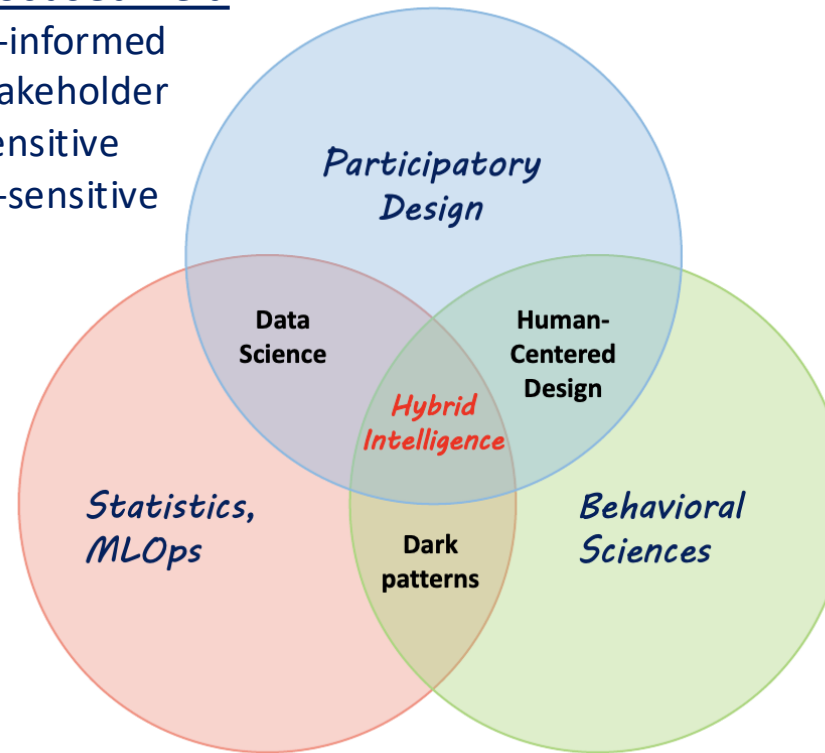
Hybrid intelligence development is ...

A design-focused field
- Domain-informed
- Multi-stakeholder
- Value-sensitive
- Context-sensitive

Participatory Design

Data Science

Human-Centered Design

Hybrid Intelligence

Statistics, MLOps

Dark patterns

Behavioral Sciences

Grounded in computation AND statistics
- Involves more than extracting patterns from data
- Also accounts for how adequately the data register relevant aspects of the world
  - Addresses the attendant ethical and scientific issues

Grounded in the behavioral sciences
- Choice architecture / JDM
- Organizational design
- Cognitive psychology
- Affective science
- ...