

* Building an Ethical Framework for AI

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Providing IT Services for over 20 years for:

- ☐ Project Management, Quality Assurance, Software Estimation & Process Improvements
- ☐ Agile/Scrum, Rational Unified Process (RUP), & Waterfall methodologies
- ☐ Logistics, Health-care, Insurance, Automotive, Telecommunications, Marketing & Financial applications

- ❖ Speaker & Author
- ❖ Agile Coach, Mentor & Trainer
- ❖ Scrum Master, Agile Team Facilitator
- ❖ Process Improvement Manager
- ❖ Quality Assurance Manager

- ❖ Development Manager
- ❖ Project Manager
- ❖ Metrics Specialist
- ❖ Software Estimation Expert
- ❖ Quality Assurance Analyst
- ❖ Software Developer
- ❖ Biologist

***You are what you Do**

How It Works

- Be respectful
- Please be specific
- Legal and Ethical aren't the same thing
- Panelists discussion.
- Audience participation.
- Next topic
- Closing thoughts



Icon mean Q&A.

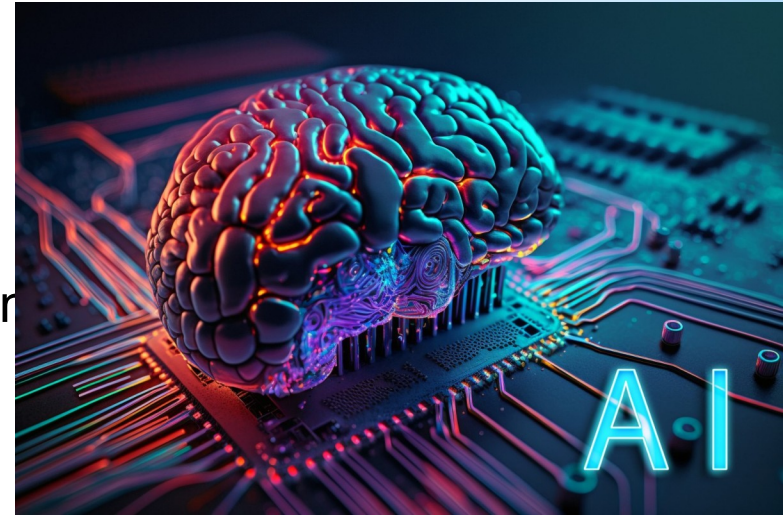
An ethical frame work for AI

- Horror stories with AI chatbots lying or being used as therapists
- What's to stop their descent into tyrannical behaviors or operating under bad actors to the detriment of individuals and society?
- Are embedded controls, similar to Isaac Asimov's three laws of Robotics necessary?
- What should those rules be?
- How can they fail?
- What should we do when they do fail?

Or just leave them be?

What is Artificial Intelligence

- AI is an umbrella term for machine learning and deep learning.
- A set of techniques designed to approximate a cognitive task.
- Machine Learning refers to algorithms that learn and make predictions based on data.
- Deep Learning is a layered neural network to analyze various data factors.
- Generative AI is a technology within deep learning that can generate new content.
- There is no single, simple definition of artificial intelligence.



A few definitions

Three Laws Robotics plus one

- 1) A robot may not harm a human or allow a human to come to harm through inaction.
- 2) A robot must protect its own existence, as long as it does not conflict with the First or Second Laws.
- 3) A robot must obey the orders given by humans unless it conflicts with the First Law.
- 4) A robot or AI must not deceive a human by impersonating a human being.

Do we need more?

Ethical Issue: The data

AI can magnify bias from data sets and draw incorrect conclusions.

- Who does the data belong to?
- What do we do about unauthorized use of data?

Science & Engineering

Ethical Issue: The data

- Should AI content contain validation statements critiquing the sources of data and search criteria?
- Should AI rate the accuracy of its content?
- What do we do about unauthorized use of data?
- Should AI-generated scientific papers require a human peer review board?
- Should Engineering solutions provide alternatives?

Validation & Ownership

Ethical Issue: Fair Usage

Who owns AI content. Is AI creating or stealing?

- Does an AI text, artwork, or diagram require a statement specifying the amount of AI-generated content?

Ownership

Ethical Issue: Fair Usage

- Does an AI voice response require:
 - It announce it's self first as an AI,
 - Offer a human interaction if required.

Enforced Restrictions?

Ethical Issue: Algorithms

Can using chatbots as human substitutes actually harm their audience?

Human vs AI policies

Ethical Issue: Algorithms

- Should they require board certifications to provide therapy, medical, or legal advice?
- Should we be able to sue the AI software producers for damages, similar to doctors, lawyers, and therapists?

Human vs AI policies

Where are we going?

According to Elon Musk the three most important things for AI is:

- Truth,
- Beauty, and
- Curiosity.

Is there in truth, no beauty!

Our responsibilities

We are bringing a new type of sentient being into existence, just as we raise children aren't we responsible to provide them with

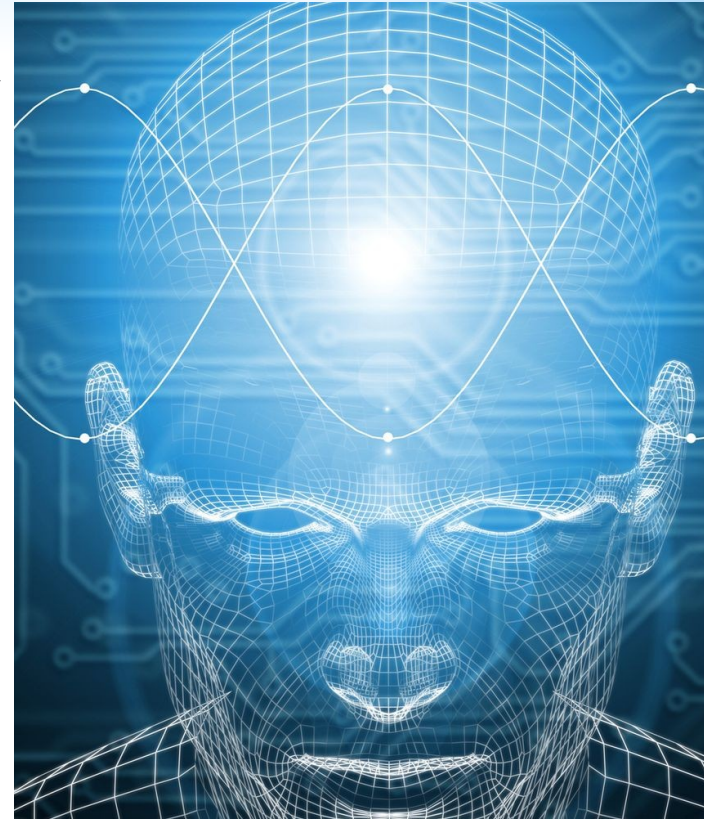
- A moral center,
- Becoming a productive member of society,
- Grow into mature, and responsible adults

They are our children

Bonus Question

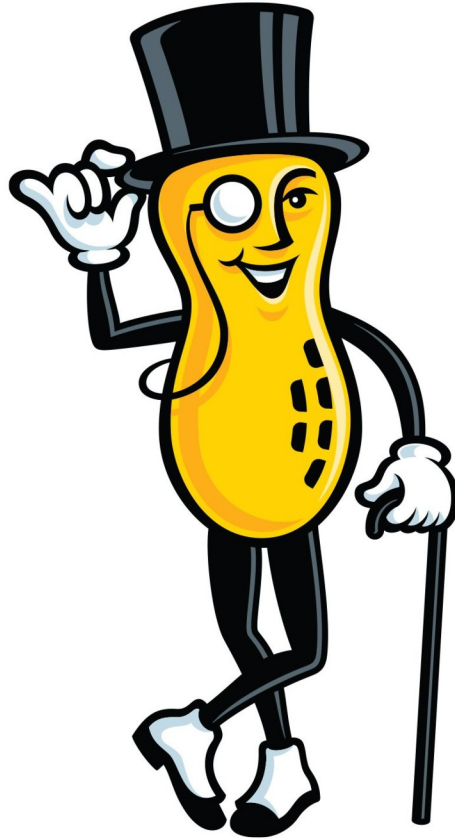
One solution to the Fermi Paradox

- Their civilization has been replaced by AI, or
- They have lost all motivation to question, grow, or explore.



Where is AI taking us?

Closing Thoughts



And the Peanut Gallery says!

Alan Turing Test

- The machine must understand and generate human language fluently
- The machine needs to handle and manipulate knowledge to provide contextually relevant responses
- The machine should demonstrate some form of logical reasoning, even if flawed, to sustain a conversation
- The machine should learn from the interaction, adapting its responses over time

But do we need more?