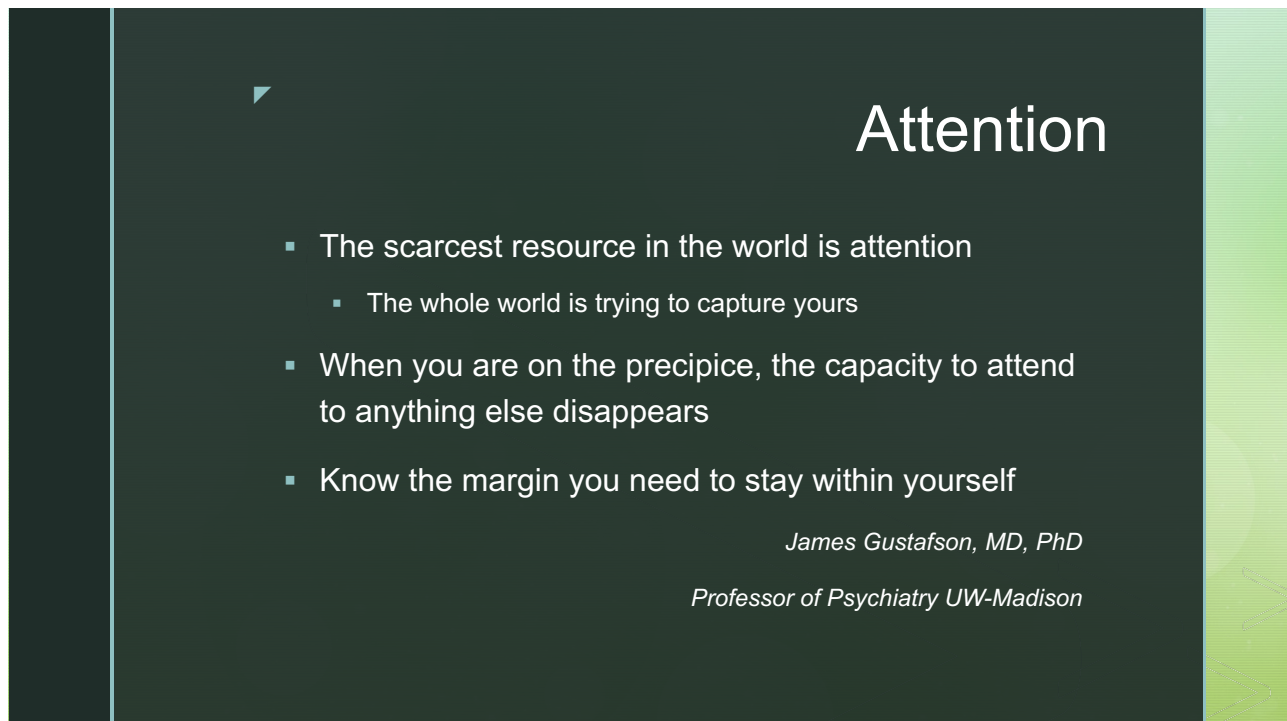


Douglas J. Reinemann, PhD
Professor of Biological Systems Engineering
University of Wisconsin - Madison

Data Driven Diagnostics: What Really Matters?

The slide features a dark green background on the left and a light green background on the right. The right side has a faint, abstract network diagram with circular nodes and connecting lines.

1



Attention

- The scarcest resource in the world is attention
 - The whole world is trying to capture yours
- When you are on the precipice, the capacity to attend to anything else disappears
- Know the margin you need to stay within yourself

James Gustafson, MD, PhD
Professor of Psychiatry UW-Madison

The slide features a dark green background on the left and a light green background on the right. The right side has a faint, abstract network diagram with circular nodes and connecting lines.

2

My career in milking machines

- Technology development
- Technology adoption
 - On farms
 - In communities
 - by real people
 - And cows
- A.I. is the next frontier

3

How does A.I. Work?

- You need big datasets to create A.I. models
 - The data is you – and cows
- You need A.I. to interrogate and make meaning of big datasets
- A.I. tools can provide a quantum leap in the capabilities to manage large complex systems such as dairy farms.
- Your job is to ask the right question

4

What does A.I. know?

- Cannot rely on what people say (think) to predict what they will do (push the button)
- Predictions based on what people do
 - And cows
- The mighty information engines
 - 8 Billion people
 - 50 Billion devices watching what you do


5

What is truth? *Johnny Cash*

- *The most commonly repeated claims?*
- *Reorient how, what, and why publish*
 - *We populate the digital universe with data*
- *The importance of asking the right question*

6

We have met the A.I.
and it is us




“We are so full of apprehensions, fears, that we don't know exactly to what it points... a great change of our psychoglocal attitude is imminent, that is certain... we need more understanding of human nature because ...the only real danger that exists is man himself... and we know nothing of man - his psyche should be studied because we are the origin

~CARL JUNG

azquotes.com

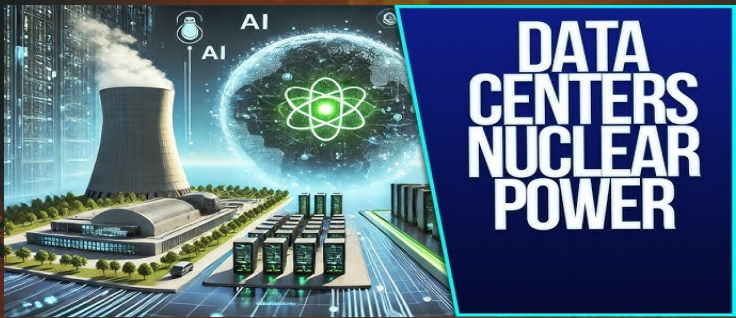
7



AI Engines
They are pushing your buttons so you will push theirs

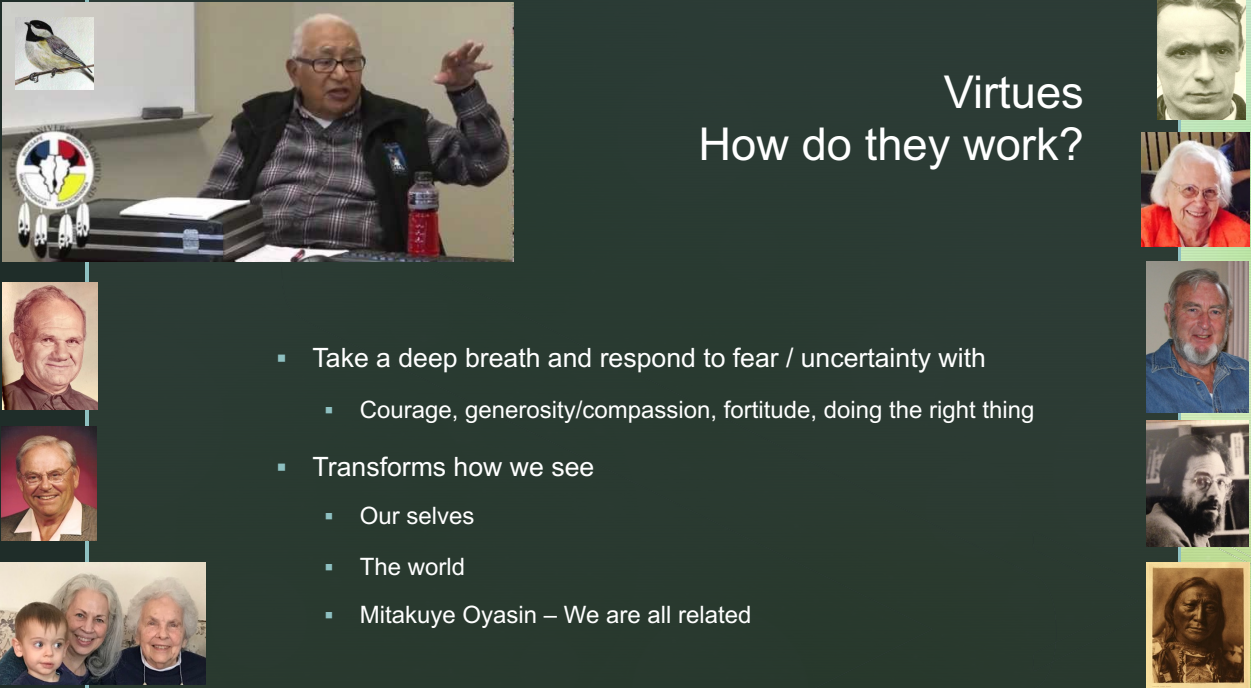
Fear leads to anger.
Anger leads to hate.
Hate leads to suffering.”
~George Lucas (Star wars, Yoda)

And pushing buttons



DATA CENTERS
NUCLEAR
POWER

8



Virtues How do they work?

- Take a deep breath and respond to fear / uncertainty with
 - Courage, generosity/compassion, fortitude, doing the right thing
- Transforms how we see
 - Our selves
 - The world
 - Mitakuye Oyasin – We are all related

9

How does AI Work?

- Every day is an experiment (on a dairy farm) – learn from it
- The scarcest (and most valuable) commodity in the world is your attention – invest it wisely
- Your parents learned excel, your children are learning python. You can too.
- Use AI to figure out what really matters
 - Don't get used, and end up on the precipice

10