
SIGNAL EDGE
AI
Neuro-Symbolic Intelligence Technology
Creating Humanized AI

Artificial Intelligence (AI) Applications

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Humanized AI

Machine Learning

Big Data + Parameters

Statistics:

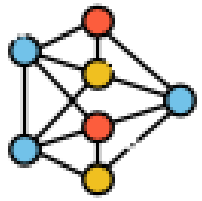
Forestry, Weather, Flu

Deep Learning

Unstructured Data + Requests

Reactions/Results:

Voice/Song, Resumes/Email



Neural Networks

Operational Data + Hundreds of Factors

Predictions:

Credit, Marketing, Fraud

Generative AI

Training Data + Commands

Actions:

Image Generation, Writing, Automation

AI Drawbacks

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Humanized AI

- Expensive
- Energy Intensive
- Copyright Infringement
- Narrow Capability
- Generates False or Misleading Information (Hallucinations)
- Not Transparent
- Slow Learning
- Lacks Adaptability
- Easily Corrupted
- Lacks Creativity

AI Lacks Humanity

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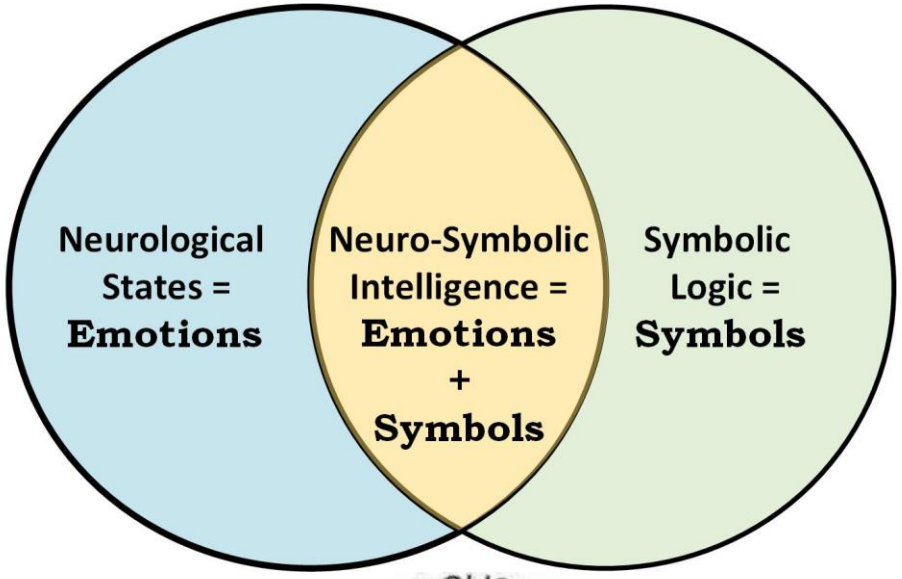
Humanized AI

- Generalize Knowledge
- Rationalize Decisions
- Energy Efficient
- Real World Awareness
- Multidisciplined
- Common Sense
- Self Reflection
- Empathy & Emotions
- Intuition
- Greater than the Sum of its Parts

Adding the Human Element to AI

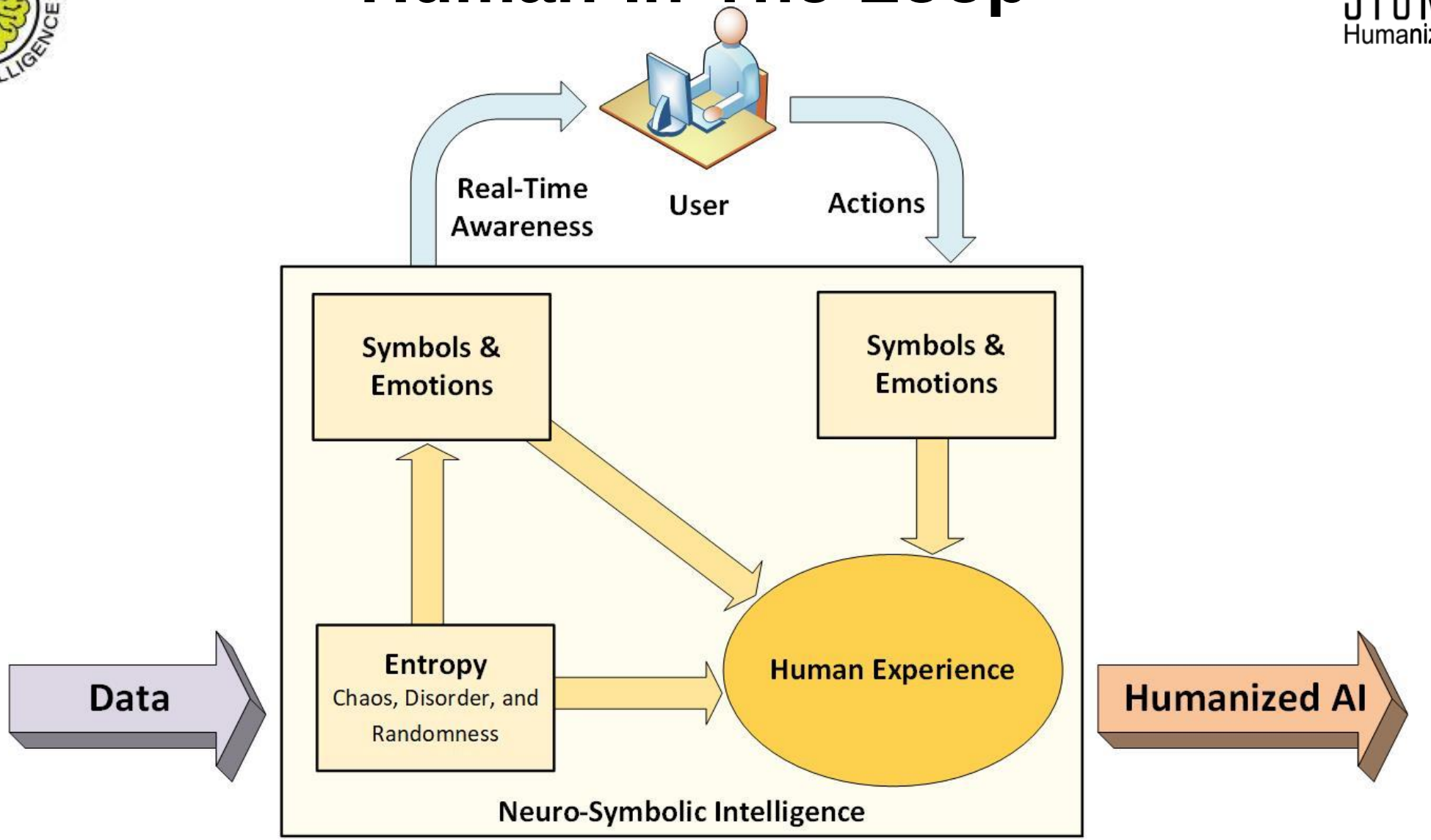


Emotions - Emotions have intensity levels and can be combined to modulate how symbols are valued, weighed, and analyzed.

Symbols – Symbols label data with generalized knowledge that can be rapidly interpretated, categorized, and learned.

Humanized AI

Human-In-The-Loop



Encoding Human Experience

Symbols

ACTIVITY CONTEXT: Driving

ACTIVITY OBJECTS

- Battery
- Charging Station
- Fast Food
- Bathroom
- Cell Service

Emotions

POSITIVE	NEGATIVE
Joy	Fear
Inspirational	Sadness
Anticipation	Anger
Surprise	Disgust
Trust	Suspicious

Humanized AI

AI ENCODED MEMORY

[ ] + [ ] + [ ] + [ ] + [ ] + [ ]

HUMAN TRANSLATION

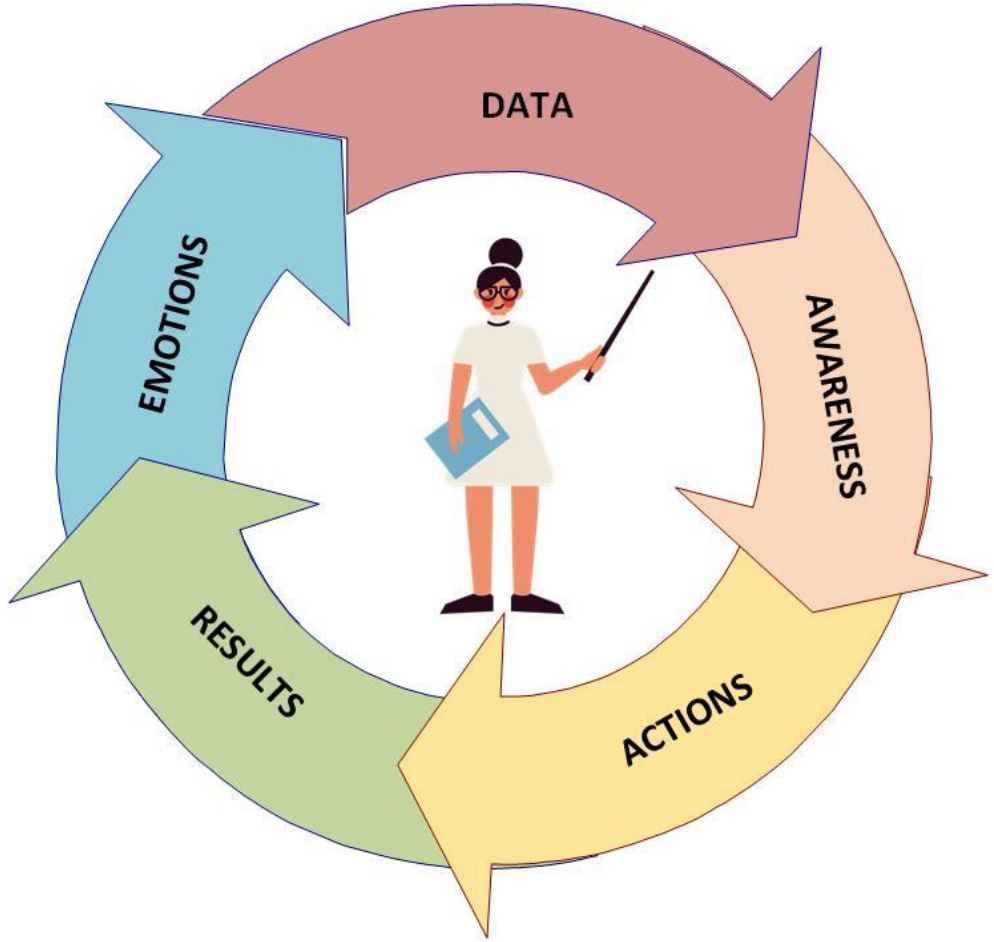
A happy trusted person is driving an Electric Car, worried and anxious of the current battery level, afraid and angry on finding a charging station in time, hungry but disgusted about selecting fast food, desperately needs to use the bathroom and is surprised and worried that there is no cell service to assist in finding the charging station, fast food, and bathroom.

Common Sense

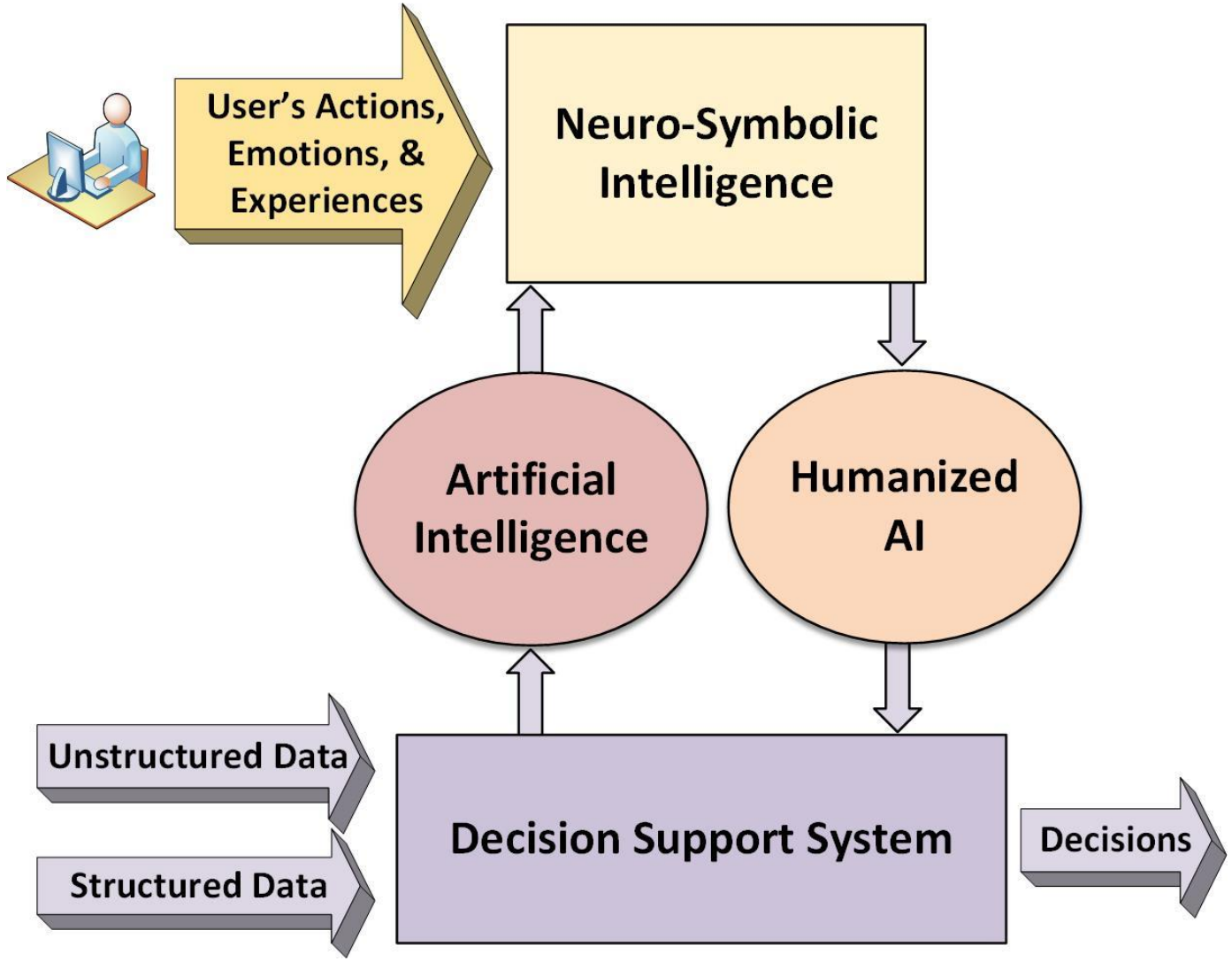
Knowing its an electric car without being told its an electric car.

Learning from the User

- ❑ User Interface Produces Situational Awareness
- ❑ Awareness Encourages User to Create Actions
- ❑ Actions Generate Results
- ❑ Results Produce and Scale Emotions
- ❑ Emotions Regulate AI Learning



Integrating Humanized AI



Benefits of Humanized AI

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Humanized AI

Real-Time Comprehension – Symbols, infused with emotions, generate awareness and create rapid understanding of complex activities.

Human-In-The-Loop (HITL) – Able to provide complete situational oversight, humans interpret, adapt, and teach.

Explainable AI (EAI) – Provides full accounting of the entire decision-making process explaining decisions from a historical and logical perspective.

AI Guardrail – AI lacks the ability to judge itself and can generate false or misleading information. Humans and Neuro-Symbolic AI confirms decision accuracy.

Data Pedigree – Previous experience identifies entropy (randomness or disorder) when processing data which reduces the data volume by 99.9% while maintaining 100% of the original data.

Rationalizes – Can judge good from bad, knows right from wrong, and has been educated on cause and effect.

Tribal Learning – Captures an employee's know-how, the experience and knowledge cultured through years of business practice.

Smarter Decisions – Understands the content of data and the context of an activity, allowing for precise decisions-making.


Satisfying the AI Customer
Signal Edge's Neuro-Symbolic
Humanized AI Technology
The Future of AI
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