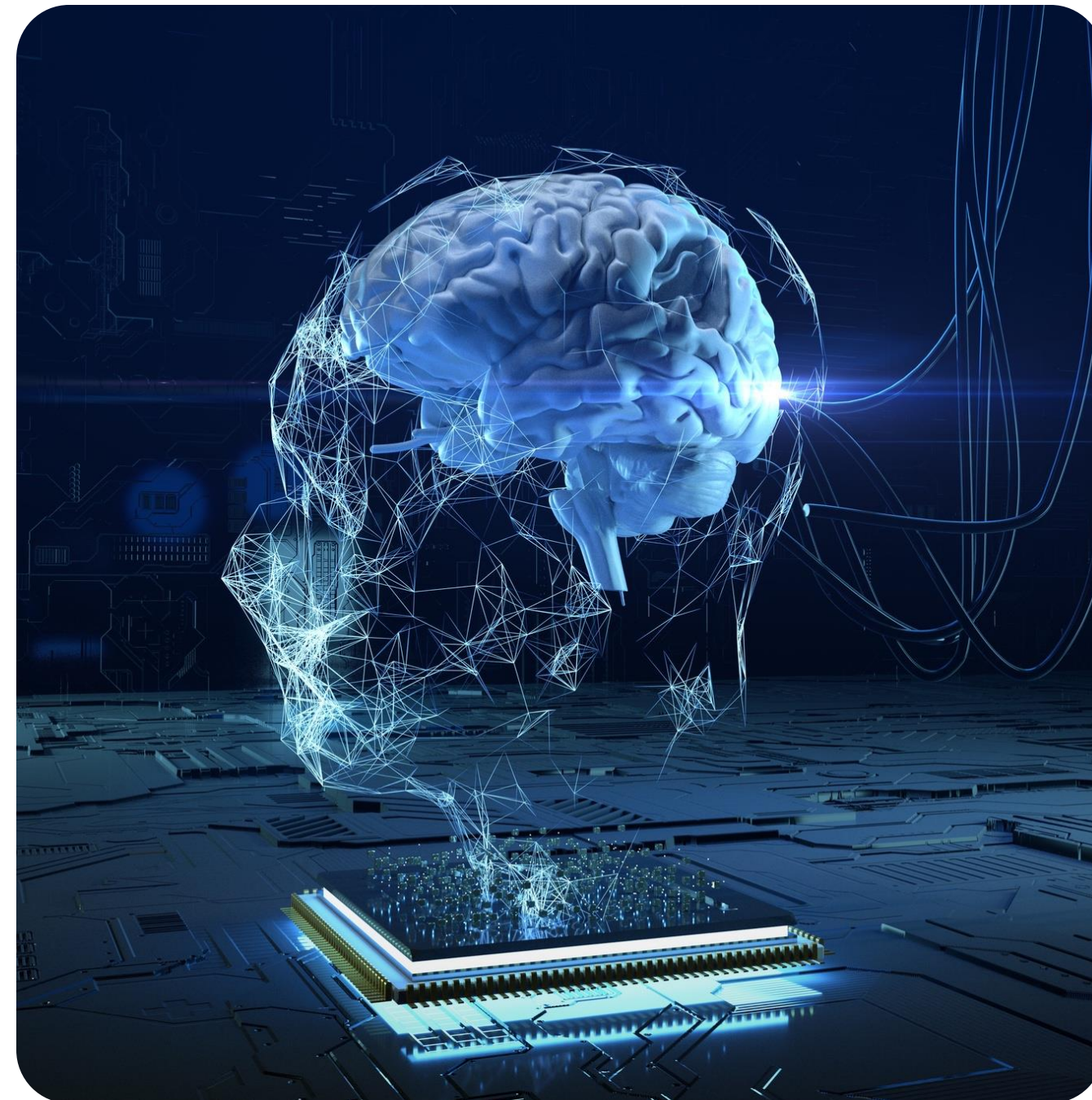


BIOMIMICRY “ARTIFICIAL BRAIN”

- **Capabilities:** Understands, learns, and applies knowledge across diverse tasks.
- **Bio-mimicry:** Emulates human cognition to solve complex problems.
- **Efficient Hardware:** Runs on standard CPUs with 80% less energy consumption.
- **Portable:** Compact, Linux-based system.
- **Technical Maturity:** Operates at TRL 9.
 - Currently deployed in support of ICD-10 Coding (Healthcare).
 - Resulting in 98% accuracy in handling structured and unstructured data (e.g., X-rays, ECGs) and translating natural language.



GENERATIVE ARTIFICIAL INTELLIGENCE VS BIOMIMICRY ARTIFICIAL BRAIN



SCENARIO:
A GAME OF ALPHA GO IS SET UP ON A TRADITIONAL RECTANGULAR BOARD.



CHALLENGE:
THE BOARD SUDDENLY CHANGES TO A COMPLETELY DIFFERENT SHAPE.



AGI RESPONSE:
AGI WILL ADAPT TO THE NEW BOARD, AS IT IS A THINKING MACHINE AND WILL CONTINUE PLAYING.



GENERATIVE AI RESPONSE:
STOP AND DO NOTHING, UNTIL IT IS RETRAINED FOR NEW BOARD SHAPE.

COMPARISON OF TECHNOLOGIES

GENERATIVE ARTIFICIAL INTELLIGENCE

- **Datasets:** Large hyperscale environment required to host the training and learning data.
- **Power:** Energy intense at 30-100 kWh+/rack
- **Training:** Training performed by provider.
- **Mini-Brains:** Not an option.
- **Data Privacy:** Data belongs to provider.
- **Thinking:** Learning capable with conditioned output.
- **Operating Environment:** GPU HW.
- **Quantum Neural Networks:** Unavailable.

BIOMIMICRY ARTIFICIAL BRAIN

- **Datasets:** Between 2-10% of the number of datasets used by generative AI.
- **Power:** Energy efficient – 13.7kWh/rack
- **Training:** Training performed by customer.
- **Mini-Brains:** Downloadable and autonomous.
- **Data Privacy:** Data belongs to customer.
- **Thinking:** Autonomous learning and thinking.
- **Operating Environment:** CPUs and IT infrastructure.
- **Quantum Neural Networks:** Yes, IBM currently.

APPLICATION – ICD 10 CODING

- **Problem:** Hospitals must adhere to ICD-10 coding standards for diagnosis and treatments. However, most hospitals lose up to 35% of reimbursements due to poor-quality coding caused by limited time and personnel.
- **Solution:** Trained by a SME, a biomimicry artificial intelligence learned ICD-10 standards, reviewed Electronic Health Records, and interpreted patient language.
- **AGI Impact:**
 - Fully trained AGI brain in **8 weeks**.
 - 100% automation with **95% accuracy** in primary diagnoses & 94% in secondary.
 - Reduced coding time from an average of 1 hour to **30 seconds** per patient.
- **Results:** Significant reduction in diagnostic errors.
 - Increased reimbursements, **millions** in revenue.
 - Currently deployed in 3 hospitals, with 18 additional hospitals requesting access.

