Neuromorphic Computing: Brain-Inspired Hardware

Neuromorphic Chips

- Spiking neural networks
- Event-driven computation
- Analog processing elements

Examples

- Intel Loihi 2
- IBM TrueNorth
- Neurogrid

Advantages

- Ultra-low power consumption
- Massive parallelism
- Real-time processing

Medical Use Cases

- Wearable health monitors
- Implantable devices
- Edge medical diagnostics

🧠 Brain-Like Efficiency

Neuromorphic hardware consumes 1000x less power than GPUs for neural networks, enabling sophisticated AI in medical implants and battery-powered diagnostic devices.