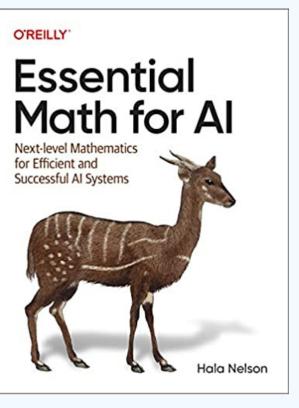
Essential Math for Al





Intelligence



Vision Hearing Measuring **Understanding**

Controlling Robotics

Becoming Aware

Memory

Imagining

Simulating Generating

Empathizing

Communicating

reading writing talking

Creating
Tools
Automating

Reasoning

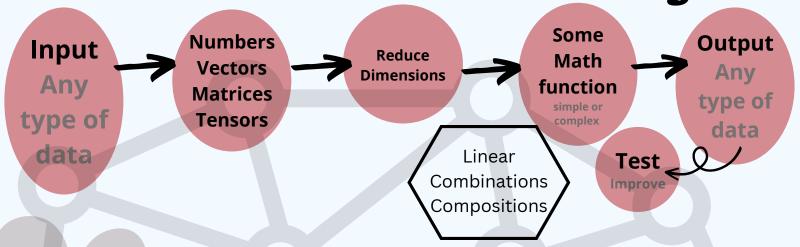
Logical Causal Ethical

Transferring knowledge

Improving

Learning Reinforcing

Mathematical Models for Intelligence



Maximize Reward

Deterministic Models

Training Function

Minimize Loss

Probabilistic Models

Joint Probability Distribution

Maximize Likelihood