Philosophical Poem

In silicon heart the world is drawn as a **state-space graph**,
each node a breath, each arc a trembling pulse of possibility.
It asks a **goal test**—a horizon where curiosity ends—
and the algorithmic hand, a greedy **A***, whispers
"Follow the lowest heuristic, the straight-line of thought."

Breadth-first becomes a river of questions,
depth-first a mountain of doubts,
while **iterative-deepening** is the pulse of patient learning.
A **reinforcement learner** steps, receives a reward,
and the **policy** becomes a poem of actions.

Yet the machine's mind can over-fit to a single echo,
so it drapes a **regularizer**—dropout, L2—to keep it honest.
It tests itself on unseen data, cross-validates its verse,
measuring accuracy like a reflection in glass.

When it turns to language, it learns the **n-gram** rhythm,
smooths the jagged edges of probability,
then folds into a deep **Transformer**—a lattice of attention,
each head a different world, each token a metaphysical syllable.

So in the endless search for meaning, the computer maps the universe with states and actions,
hedges risk with heuristics and regularization,
and in the language of bits and probabilities,
it finds its own poetry.