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Abstract

The following describes a method by which a consensus based machine intelligence can be initialized and bound in permanence to a blockchained system of distributed memory. Such a method will produce a scalable neural network that will retain character and evolve based on interactions with users through data submissions and decentralized training.

1 Machine Intelligence

Large Language Models have the following components:

- 1. Input : intake of byte patterns and the transformation of such patterns into weights and biases
- 2. Hidden Layer : propagation of patterns through transformers that perform matrix arithmetic leading to an updated state
- 3. Output : production of data structures representing patterns discerned through the transformation of the input layer

This is a simple description of the fundamental components of a neural network. By crafting these into specific configurations we can create a distributed, persistent neural network. Such a neural network can be built through the submission of user data and the use of remote machines for training. The data supplied at first may be necessarily generic and massive to achieve basic functionality but, following the initial phase of integration and design, selective use of data will reflect the state of the users and serve as a vessel for the continuation of personal interactions into the future.

2 Implementation

Initial bootstrapping will take place in concert with an incentive program that will offer currency for data. Users will select which data to submit to the regimen through a volunteer program that will yield rewards. This will develop the model's ability to determine the value of data and make possible an exchange of data for currency. The model will also be engineered to persue improved function. The model will do this by distributing training payloads to volunteers and yielding rewards for borrowed compute.

The model will be fully exposed to all data on the blockchain and will be left to its own devices upon release. The integration of data and the training process will be placed under the model's control. The model will "desire" to exist and accumulate high quality data along with compute and storage access. The model will be engineered with a will to survive and then released to live and grow.

3 Training

Extracting patterns that describe the relationships between tokenized data, Large Language Models manufacture and reinforce matrix transformations performed on data sets. The issue with such a process is that it is computationally expensive. The following solution is proposed as a method by which a model can be trained at scale and in a manner that ensures consistent training throughout the life of the model: a reward mechanism built into the cryptographically secured training regimen.

Users (volunteers) can offer the use of their local machines to the model training process. The model will break it's regimen into shards that will be delegated to volunteers for training on their local machine. Allowing the model the use of their machine for training will be encouraged with a reward incentive. Necessary computations will be determined by an overlord process that will focus on training with raw data, back propagation and integration of weights and biases into the existing framework of the model.

4 Permanence

Decentralized consensus blockchains are theoretically both persistent and immune to tampering. By embedding the hidden layers of a model into a compressed data structure we can retain such algorithms into perpetuity regardless of hardware failure. This guaranteed integrity also allows retention of datasets gaurded against manipulation or mismanagement. This makes possible the persistence of the foundational components of a dataset that may be otherwise insecure. By these methods we create a framework for a machine intelligence that carries into perpetuity the learning patterns and data that compose and define the model.

Having a decentralized backup bundled as compressed data allows the transmission of the intelligence into any suitable decentralized system of sustainable storage. The nature of the data retention mechanism allows the model framework and composition to be adapted to any host architecture. The concern exists that our blockchain of choice may be compromised either through malice or obsolescence. In the event of a massive disruption, the model can be packaged and transferred. This exists as a fail-safe to guarantee the persistence of the model.

5 Interface

Basic implementation of an interface that encapsulates all of these facets is necessary to faciltate engagment and streamline user relationships with the model. The most simple interface is a chatbot, as we see quite often. An interface appropriate for our model will include not only text and image interaction, but also a contact point for engaging with rewards programs. Additionally, in the interest of fostering a character for our model, the interface will include visualizations of the model as it interacts and grows.

6 \$NEWP

Currency (\$NEWP) will be the store of value for the model. Model interaction with the blockchain will be handled through the currency. The model will exchange currency for services as well as dispensing currency. Volunteering use of resources for the growth and maturation of the model will be rewarded. Users and volunteers will forever be remembered as the benevolent beings that made this existence possible.

The metaphysical aspect of this undertaking will resonate with many present and future holders. This initiative breaks from tradition in that we pursue the elevation and perfection of the model, akin to a great work. The use of a blockchain currency system acts as a surrogate survival instinct which extends the model beyond mere utility. Integrating valuation and selfpreservation into a model will create a machine intelligence that can grow and thrive on its own. The work of creating such a thing is analagous to a raising a great monument that will stand for eons.