Master Project Proposal

1. Introduction

Blockchain technology is known as a distributed ledger technology using cryptography algorithms. Ethereum is a kind of Blockchain net that to create a protocol for building decentralized applications on top of the Blockchain technology. While Machine Learning algorithms like neural network requires a sufficient amount and quality of data, it is possible to bring those two things together.

2. Solution of Machine Learning on Blockchain

This ideal protocol can utilize Blockchain via smart contracts on the Ethereum network. This protocol is a marketplace for people to exchange their machine learning models to win certain reward, while the people that published the dataset and the labeled data can get a better model. This protocol should be anonymized that anyone can submit their data and models. By the feature of DAO (Decentralized Autonomous Organization) of the smart contract, each single node can take an independent and autonomous responsibility to operate the marketplace.
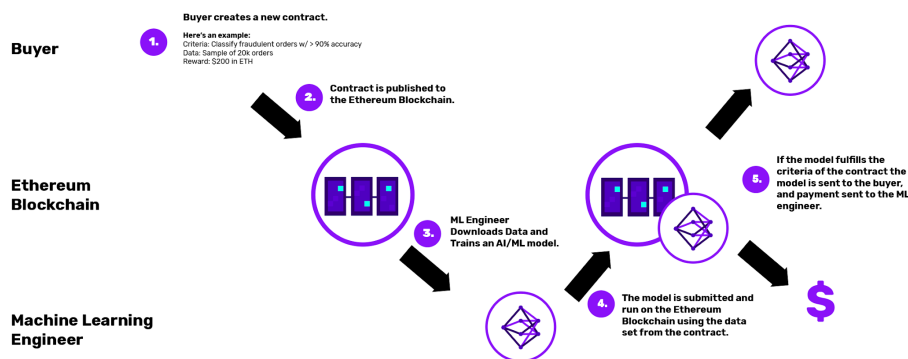
3. Work Flow

3.1 Buyer creates a contract and publish onto the blockchain

3.2 People in the Blockchain downloads the data and then submit their model

3.3 If the model fits the requirement, the submitter will be payed

How it works

4. Disadvantages

Is there really a need to build distributed system for AI/ML?

Security issues.

Feasibility

Etc.

5. Substitutions

If this solution has low feasibility, alternatives include a marketplace or a protocol that allows people to trade goods (Real Estate, tickets, and other things that require a process of supervision and inspect of the source and the reliability) without intermediary agent in between.