WeBank's end user stories

1.Blogs

Akraino Edge Stack Use Cases: WeBank's End User Story

By LF Edge February 18, 2020

2. Twitters

3. Original Content

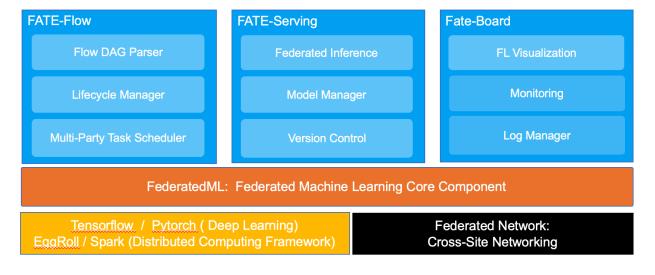
Enzo Zhang Julie Han zifan wu

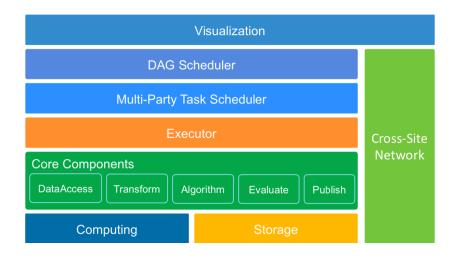
The AI Edge Blueprint Family

WeBank has deployed The Al Edge: Federated ML application at edge blueprint. With this blueprint, researchers and developers could use the data stored in different entities like hospitals and banks to build a model without actually transfer data. Moreover, our platform can help the engineer use more data and features to train their model so that their model can have a better performance in real tasks. And the Federated MI Application at Edge blueprint has been deployed in a warehouse monitoring task and helps the whole team get a good performance.

To make the Federated ML Application easier to use, our team build a tool called FATE. FATE (Federated AI Technology Enabler) is an open-source project initiated by Webank's AI Department to provide a secure computing framework to support the federated AI ecosystem. It implements secure computation protocols based on homomorphic encryption and multi-party computation (MPC). It supports federated learning architectures and secure computation of various machine learning algorithms, including logistic regression, tree-based algorithms, deep learning and transfer learning.

A picture of the architecture





Keywords:

- 1. DAG
- 2. Component-based Pipeline
- 3. Multi-Party Scheduling
- 4. Cross-Site Transmission
- 5. Distributed Computing
- 6. Distributed Storage
- 7. Visualization