

TECH OFFER

DataS: a new software for data collaboration

KEY INFORMATION

TECHNOLOGY CATEGORY:

Infocomm - Artificial Intelligence

TECHNOLOGY READINESS LEVEL (TRL): **TRL3**

COUNTRY: **SINGAPORE**

ID NUMBER: **TO175220**

OVERVIEW

Acknowledging the importance of high-quality data, DataS project aims to revolutionize data lifecycle management in the AI to improve data accessibility, collaboration, and commercialization. The solution enables (i) efficiently clean, process and extract valuable data assets from high volumes of mass data, and (ii) contribute and commercialize high-quality data assets without disclosing the actual data. DataS comprises three pillars: (1) GLASSDB serves as an end-user database, including add-in tools for data cleaning, visualization, security, aiding data owners in preparing data for future transactions. (2) Apache SINGA offers a powerful machine learning library to allow users to efficiently apply or develop AI models on their data. (3) Falcon enables privacy-preserving federated learning. It allows multiple parties to develop AI applications using joint data without compromising privacy.

TECHNOLOGY FEATURES & SPECIFICATIONS

This technology uses a zero trust, three-layer design to ensure security and flexibility in data handling and AI development:

1. Falcon Federated Learning:

- Enables secure collaboration without sharing data.
- Supports various models (deep neural networks, LLMs, SVMs) and frameworks (TensorFlow, PyTorch, etc.).
- Handles structured, semi-structured, and unstructured data.

2. Apache SINGA:

- Scalable deep learning for healthcare applications.
- Supports data visualization, cleaning, extraction, and distributed training.

3. ForkBase:

- On-premise data storage with version control.
- Features data obfuscation tools (pseudonymization, anonymization, synthesization) for enhanced privacy.

This solution is ideal for industries needing advanced AI with stringent data protection, especially healthcare.

POTENTIAL APPLICATIONS

AI requires good quality data and representative data, but privacy and security are the concern. we help you to unlock the power of data and collaboration, in a privacy-preserving and compliant way.

Our solution works for Data exchange activities in any industry. Now we focus on financial, medical and legal data.

UNIQUE VALUE PROPOSITION

We are the first solution that integrate data extraction, AI application and data collaboration in a single database. It helps our clients to commercialize their data asset easier, cheaper and more secure.