The A4L architecture is intended to support the development of AI assistants, collection and analysis data on adult learners and learning, use of data for personalization of learning in the AI assistants, and reinforcement of the teacher-learner information feedback loop

Data Engine

Data Upload

- API ready to provide users to easily transfer data to the infrastructure
- Systematically design to separate data based on AI technology

Data Standardization

- Data transfer module to retrieve the data from an AI agent in the Caliper Analytics formats
- Data preprocessing module accompanying data file along with its metadata

Data Anonymization

- Anonymize Personally Identifiable Information (PII) in both structured and unstructured data
- Designed to automatically process after data upload and standardization modules

Data Store

- Leverage AWS Athena feature to house post-processing data files
- One single table to hold all PII making it convenient to search for all learner's data

Data De-anonymization

 Use IAM permission for access de-anonymized information through a separate API

Data Download

API ready to download anonymized data

Analytics Pipeline

Personalization

Statistical Analysis

Visualization Pipeline

Dashboard

User journey

Educational Development

Micro-level

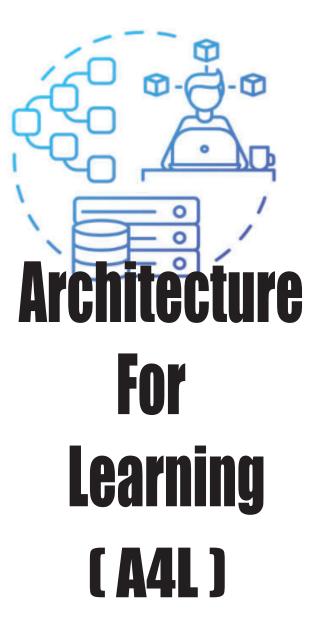
Managing HOW to learn

Meso-level

Managing MOTIVATION to learn

Macro-level

Managing TIME to learn





Contact A4L team - Ploy Thajchayapong (ploy@gatech.edu)

Architecture For Learning (A4L)

