Jaseci Week 1

Introduction and Installation

What is **Jaseci?**

Jaseci and Jac are a top-down rethinking of the system stack to simplify the creation of sophisticated production software, allowing the programmer to express solutions with high-level abstractions and the runtime system to subsume and hide the underlying sub-applications and inter-machine resources. Jac has been shown to reduce AI development timelines by 10 times and the Jaseci runtime automates decisions and optimizations typically requiring manual engineering roles.
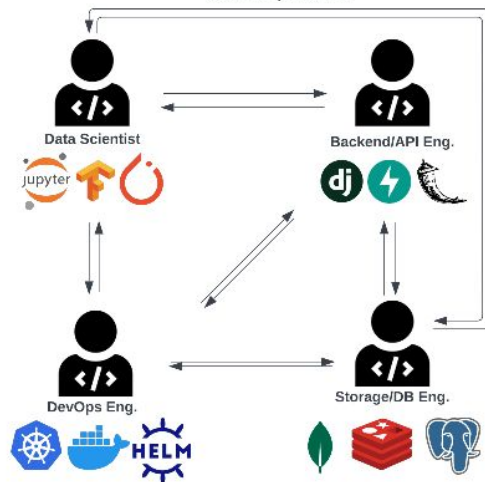
Why we need Jaseci?

The landscape of software development has changed significantly in the past two decades, with applications being served through a network of multiple services. To address the complexity of building diffuse applications, two key abstractions have emerged: Kubernetes and Serverless Computing. Jaseci is a solution aimed at accelerating and democratizing the development and deployment of scalable AI applications, with a set of high-level abstractions for programming sophisticated software in a micro-service/serverless AI environment and a full-stack architecture and programming model that automates much of the complexity in building distributed applications on potentially thousands of compute nodes.

Goal

(A) Traditioinal AI Application Development

Many specialized roles required. Messy inter-roles dependencies and complexities.

Data Scientist

Backend/API Eng.

DevOps Eng.

Storage/DB Eng.

(B) AI Application Dev. Empowered by Jaseci

Jaseci Engineer

Jaseci automates the management of the complex application stacks as part of the runtime execution engine.

ML

API

DevOps

Stroage

Jaseci is a revolutionary computational model that reduces development time and eliminates backend code, **leading the way in AI innovation**.

How Jaseci Works?

1. Architecture
2. Abstractions

A) Managed data hierarchy and optimization

B) Dynamic compnentization via Action Abstraction

C) Functionality Encapsulation with Walkers

Language Level abstractions

1. Graphs, Nodes and Edges
2. Walkers
3. Abilities
4. Actions

Installation

https://docs.jaseci.org/support/guide/getting_started/installation.html

Interfacing Jaseci

1. Local JSCTL
2. Remote JSCTL
3. JSSERV

Running your own Conversational AI

1. Run the CanoniCAI on your personal computer
2. Quick walkthrough on how this works