

UHMAI: Unified Hypervisor Management and Automation Interface

Objective:

To develop an **automated** system for simplified and **scalable VM deployment** across multiple hypervisor platforms.

Problem Statement:

Manually managing VMs across multiple hypervisors is time-consuming, inconsistent, and lacks automated scaling capabilities.

Motivation:

To eliminate the manual and error-prone processes of deploying and managing VMs across diverse hypervisor platforms.

Tech Stack Used:

- Python (Flask + Requests)
- Terraform + Ansible
- Proxmox/VMware
- Prometheus
- Docker
- Nginx
- HTML + Tailwind CSS

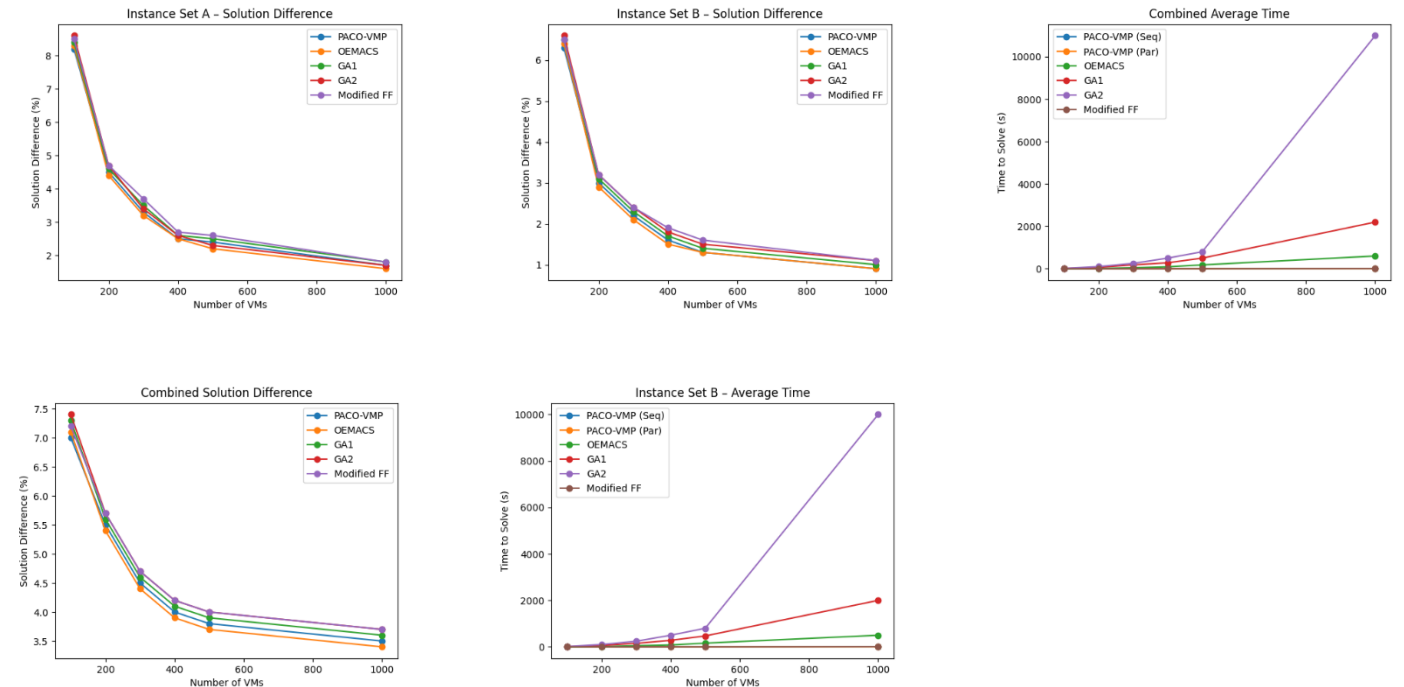
Algorithms:

- Modified Firefly
- Modified PACO-VMP

Github Link:

<https://github.com/Siddhant-Kundargi/UHMAI>

Results:



Architecture Diagram:

