Kubernetes for Medical Deployments

Kubernetes (K8s) orchestrates containerized ML workloads across clusters

⚙️ Core Components

Pods
Smallest unit containing containers

Services
Expose pods with load balancing

Deployments
Manage replicas & rolling updates

🔧 Configuration

ConfigMaps
Store configuration data

Secrets
Manage sensitive credentials

Volumes
Persistent data storage

⚒️ Scaling Features

📈 Horizontal Pod Autoscaling (HPA) ⚡ Resource requests/limits 🎮 Node affinity for GPU scheduling