

# The AI Edge: Federated ML application at edge



The AI Edge Fed...on at edge.pptx

| Case Attributes                  | Description                                                                                                                                                                                  | Informational |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Type                             | New                                                                                                                                                                                          |               |
| Blueprint Family - Proposed Name | The AI Edge Blueprint Family                                                                                                                                                                 |               |
| Use Case                         | Federated machine learning applications for edge devices                                                                                                                                     |               |
| Blueprint proposed Name          | Federated ML application at edge                                                                                                                                                             |               |
| Initial POD Cost (capex)         | TBD                                                                                                                                                                                          |               |
| Scale & Type                     | 1 Arm/x86 server, unlimited Arm/x86 clients                                                                                                                                                  |               |
| Applications                     | Include but not limited to<br><br>1. federated machine learning applications on smart mobile devices.<br>2. federated machine learning applications on IoT devices.                          |               |
| Power Restrictions               | Varies                                                                                                                                                                                       |               |
| Infrastructure orchestration     | The cloud/network infrastructure: Containers, lightweight Kubernetes K3s, Kubernetes ecosystem<br>Operating systems: Linux (CentOS, OpenEuler)<br>Container runtime Docker, KubeVirt for VMs |               |
| Workload Type                    | Containers/VMs                                                                                                                                                                               |               |
| SDN                              | Flannel for container networking                                                                                                                                                             |               |
| Additional Details               | NA                                                                                                                                                                                           |               |

This Blueprint was approved by the TSC on 16 April 2020.

As per the Akraino Community process and directed by TSC, a blueprint which has only one nominee for Project Technical Lead (PTL) will be the elected lead once at least one committer seconds the nomination after the close of nominations. If there are two or more, an election will take place.

Self Nominations begin on 29 March 2021 and will conclude on 8 April 2021

| Committer    | Committer Company | Committer Contact Info                                           | Committer Bio | Committer Picture | Self Nominate for PTL (Y/N) |
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