

Serverless Computing on the Edge

Project Logistics:

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Min-max team size: 4-5

Expected project hours per week (per team member): 6-8

Project Overview:

Serverless Computing paradigms are useful for low latency and low footprint task execution. Augmented Reality and many mobile applications require low latency compute with minimal network response times. Many of the Edge network devices have significant compute capacities that can be leveraged for a quick turnaround. Low footprint functions are quite ideal to perform some quick compute without any compromise to network functionality. ASR1k platforms support running containers and we would like to prototype and investigate use cases that can enable edge compute with some applications. Any application can be used as a sample for an implementation in this environment with the intent to understand and drive for some generic infrastructure to support serverless environments on an ASR1k.

What the students will get out of this:

- Cloud Computing and Serverless workflows
- Containers and container orchestration.
- Depending on Applications - some understanding of those specific domains.