LamPy

Make NumPy easily Edge-y

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Challenge

Make NumPy codes support serverless architecture easily.

Rationale

- No need to understand legacy scientific code to parallelize.
- Allow both responsive interaction and optimized batch jobs.
- Cheap, easy to deploy, and convenient

Inspiration

Dask
- Support HPC and lambda (`Dask.distributed`)
- Great optimization, scheduling, memory management and locality.
- Need to change the code a lot

Pywren
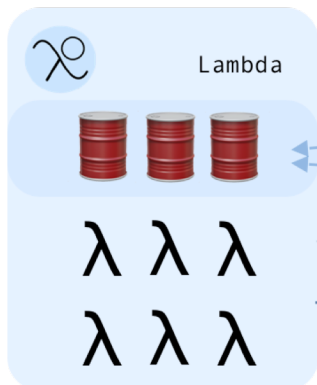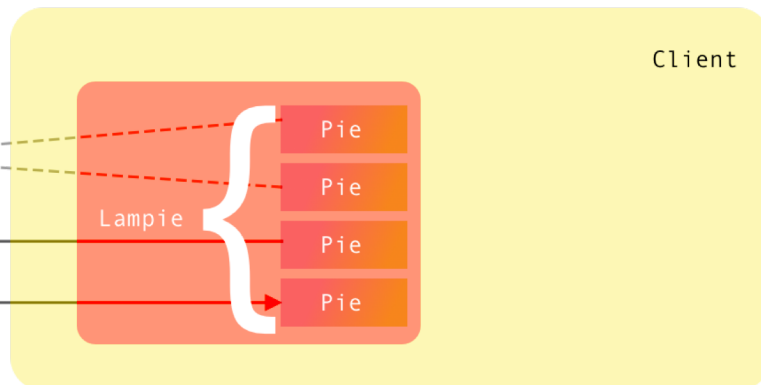- A Minor condor.
- Etc…

Goal For the semester

```
import lampy as np
```

Change only a few lines of code, and make the original numpy project parallelize on Open-Lambda.

Design

Example

Performance

Future Work