# Heron Redux (Karthik)

- Started in 2013 at Twitter
  - Sanjeev and Karthik
- Motivated by several issues with Apache Storm
  - Inability to debug/tune/resource reservation
  - Several GC incidents
- Open sourced May 25, 2016 (see <u>blog post</u>)
  - https://github.com/twitter/heron
  - http://heronstreaming.io
- Apache 2.0 License



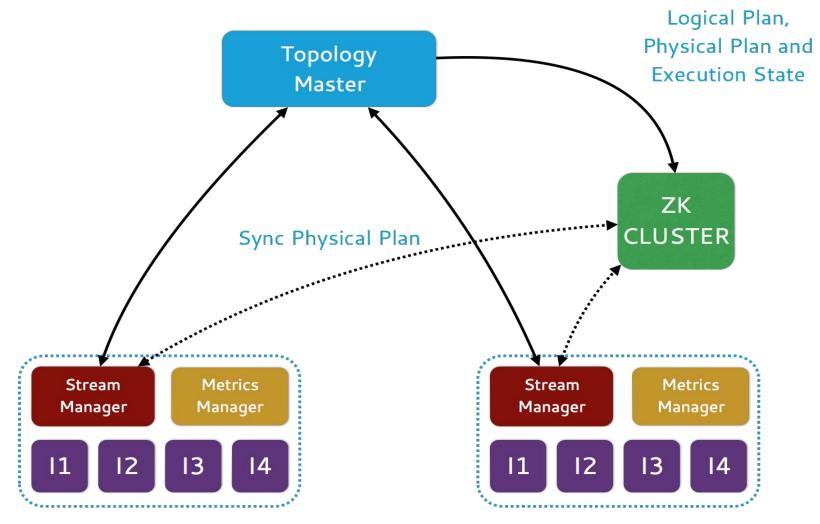
## Heron: Community

- 1816 commits
- 60 contributors
- 2620 github stars
- 1118 pull requests 25 open
- 213 open issues
- Production at Twitter > 2.5 years
- Production at WeChat, Fitbit, Google, Microsoft, ndustrial

### Heron: Key Features

- Fully API compatible with <u>Apache Storm</u>
- Task isolation
- Developer productivity
- Ease of manageability
- Use of mainstream languages C++/Java/Python
- Kubernetes support planned (see github)

### Heron: Architecture



### Heron Papers

- Twitter Heron: Towards Extensible Streaming Engines (with Microsoft) - ICDE 2017
- Streaming@Twitter IEEE Data Engineering Bulletin - Dec 2015
- Twitter Heron Streaming@Scale SIGMOD 2015 (more than 25,000 downloads)

#### Heron + CNCF

- Heron seeks a neutral foundation to grow the contributor community
- Desire to integrate with CNCF projects such as k8s + take advantage of CNCF services such as events, cluster and so on!
- Inception level project