

Live Space-time Tracks of Vehicles Using Foglets Infrastructure

CPS: Breakthrough: Programming and Execution Environment for Geo-Distributed Latency-Sensitive Applications / Award# 1446801 / Award date 1/1/2015

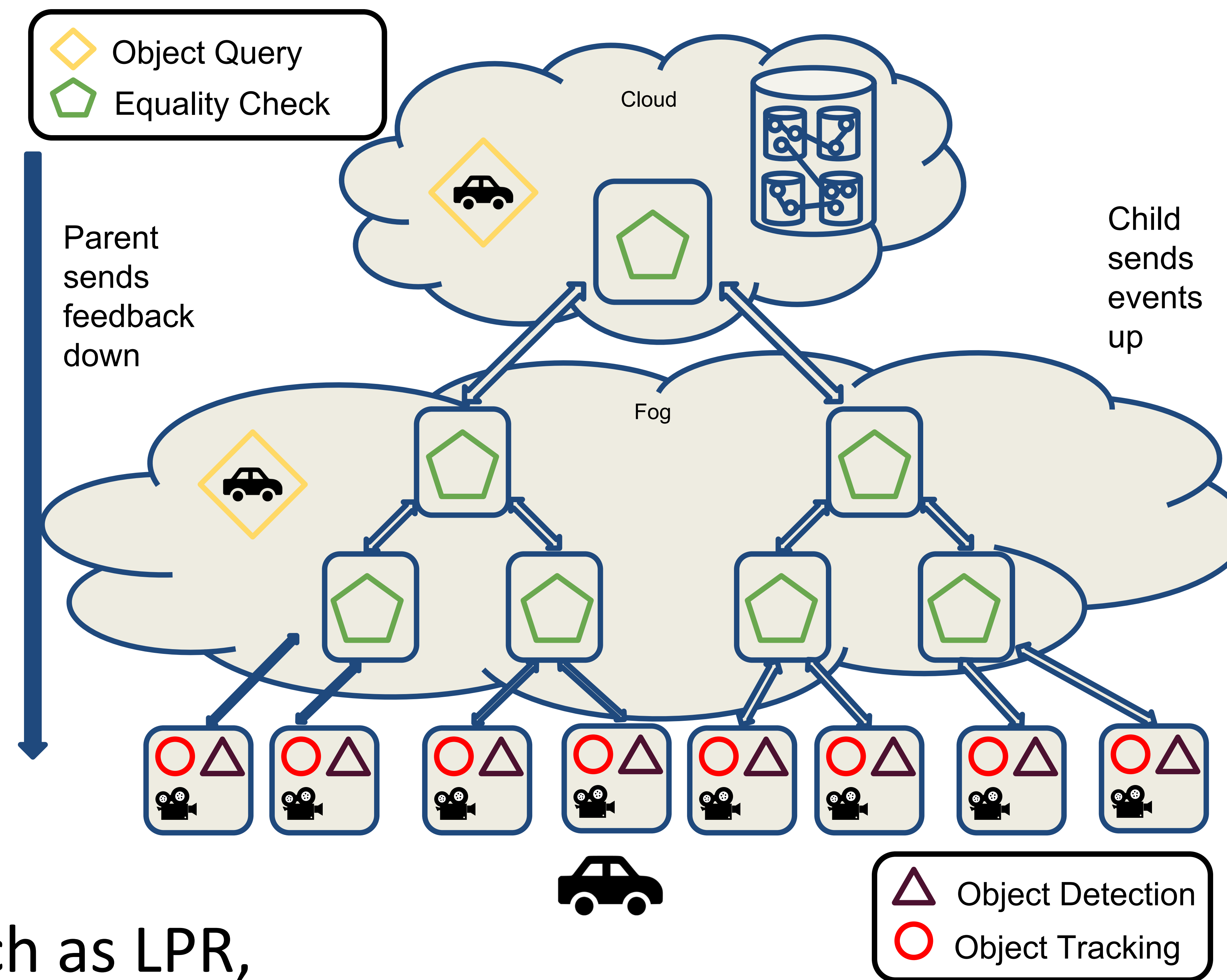
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Challenge:

- Automate live tracking and forensics for suspicious vehicle tracking across space and time using camera networks and multi-modal sensing in a large geographical space (such as Georgia Tech campus).

Solution:

- Auxiliary sensing modalities (such as LPR, TPMS) for vehicle signature to correlate with video tracking
- Foglets distributed infrastructure for spawning/migrating application components



Scientific Impact:

- In situ demonstration of Foglets infrastructure for geo-distributed situation awareness
- Meeting latency constraints for applications that span the computational continuum from the cloud to the edge

Broader Impact:

- Paves the way for automated geo-distributed multi-modal sensor systems that increase societal safety and quality of life
- Extends the utility computing model of the Cloud to the edge