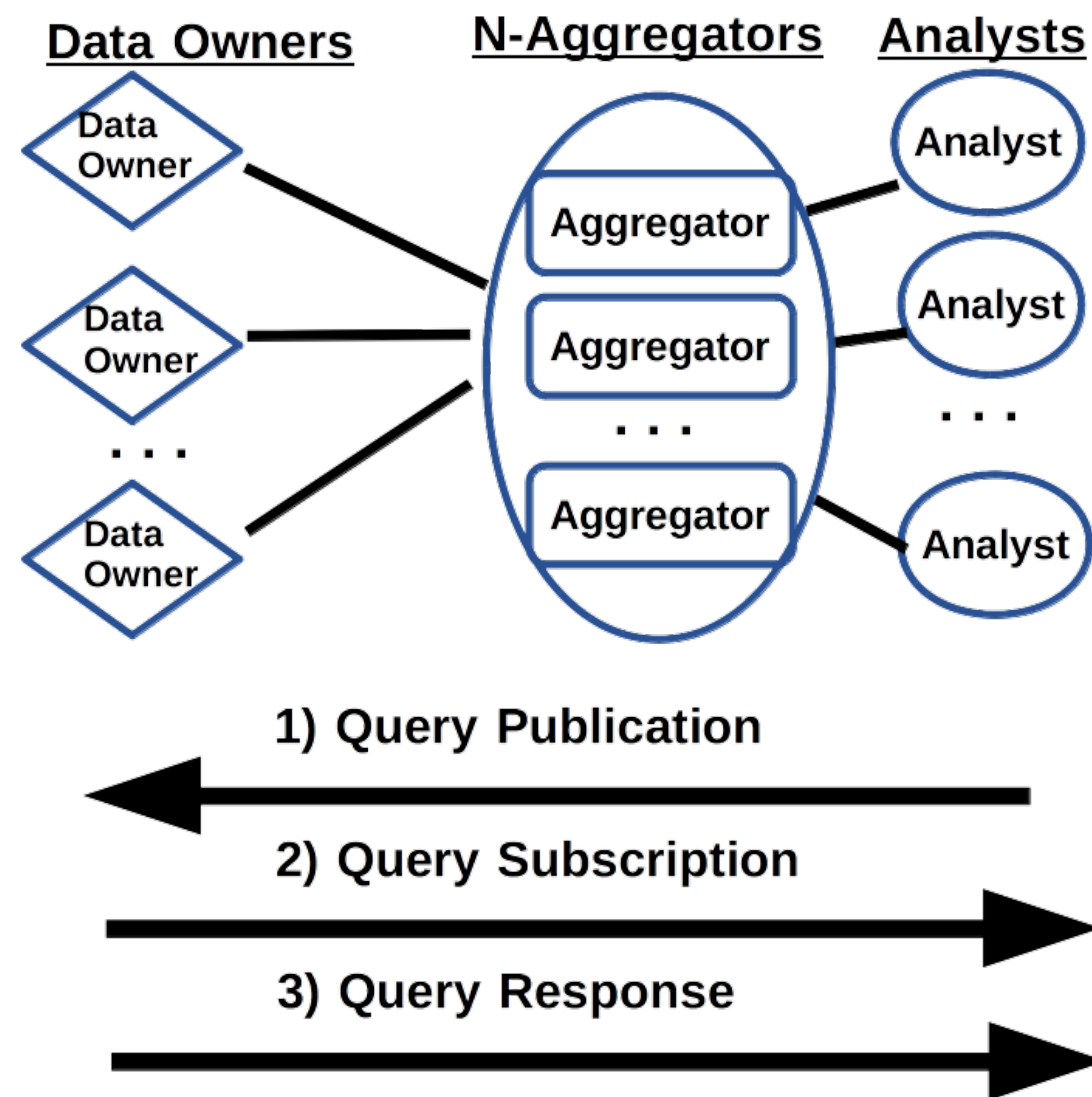


CrowdZen: Mobile Privacy-Preserving Crowdsourced Data Collection

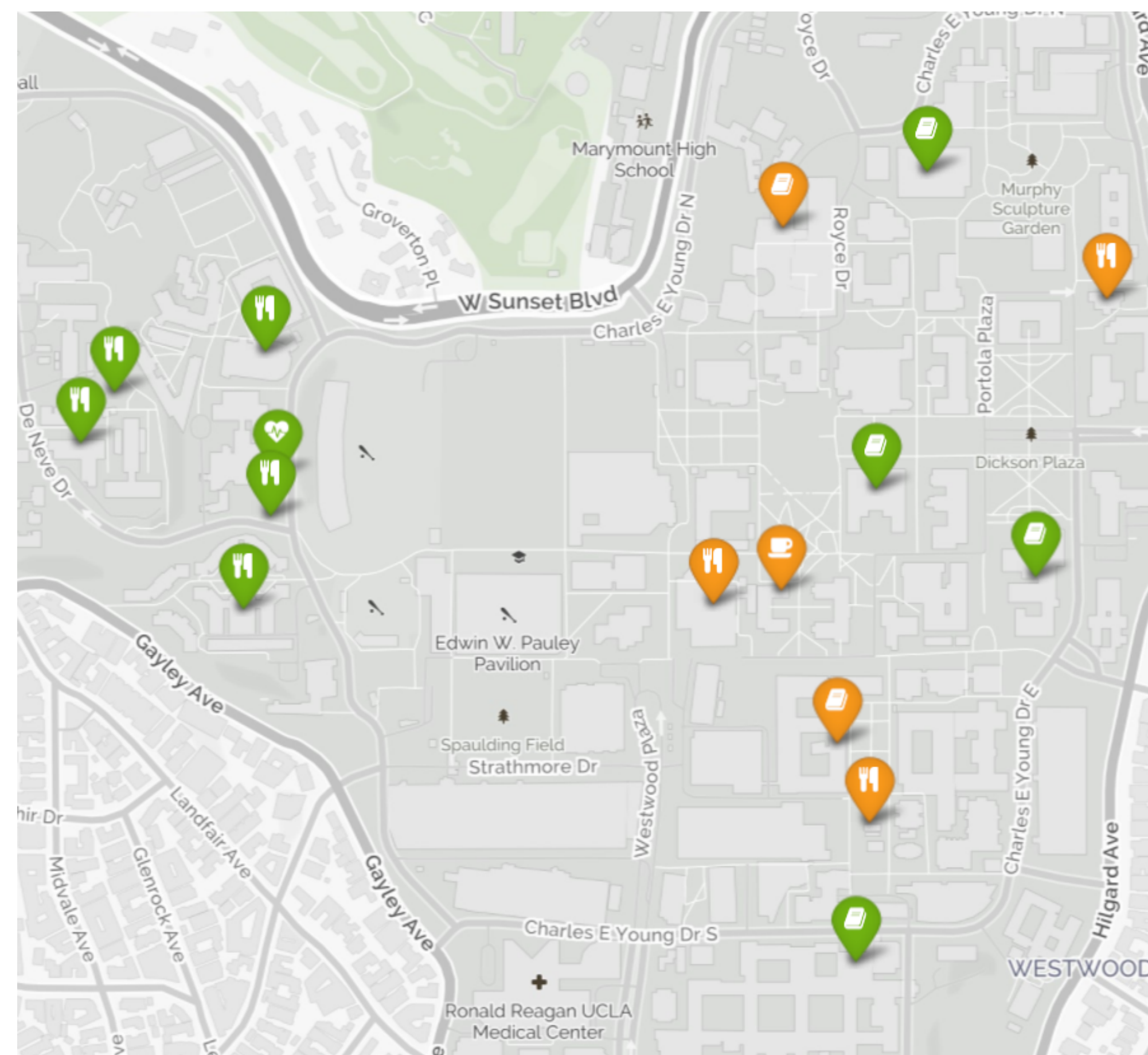
Joshua Joy (jjoy@cs.ucla.edu), Martin Verde (martinverde.edu@gmail.com), Keshav Tadimeti (ktadimeti@ucla.edu), Tyler Lindberg (tlindberg@ucla.edu), Mario Gerla (gerla@cs.ucla.edu)
 UCLA Computer Science

Problem: Privacy-Preserving Real-Time Data Collection



1. Data owners validate queries before accepting
2. Data owners privately and anonymously write their location

UCLA Map



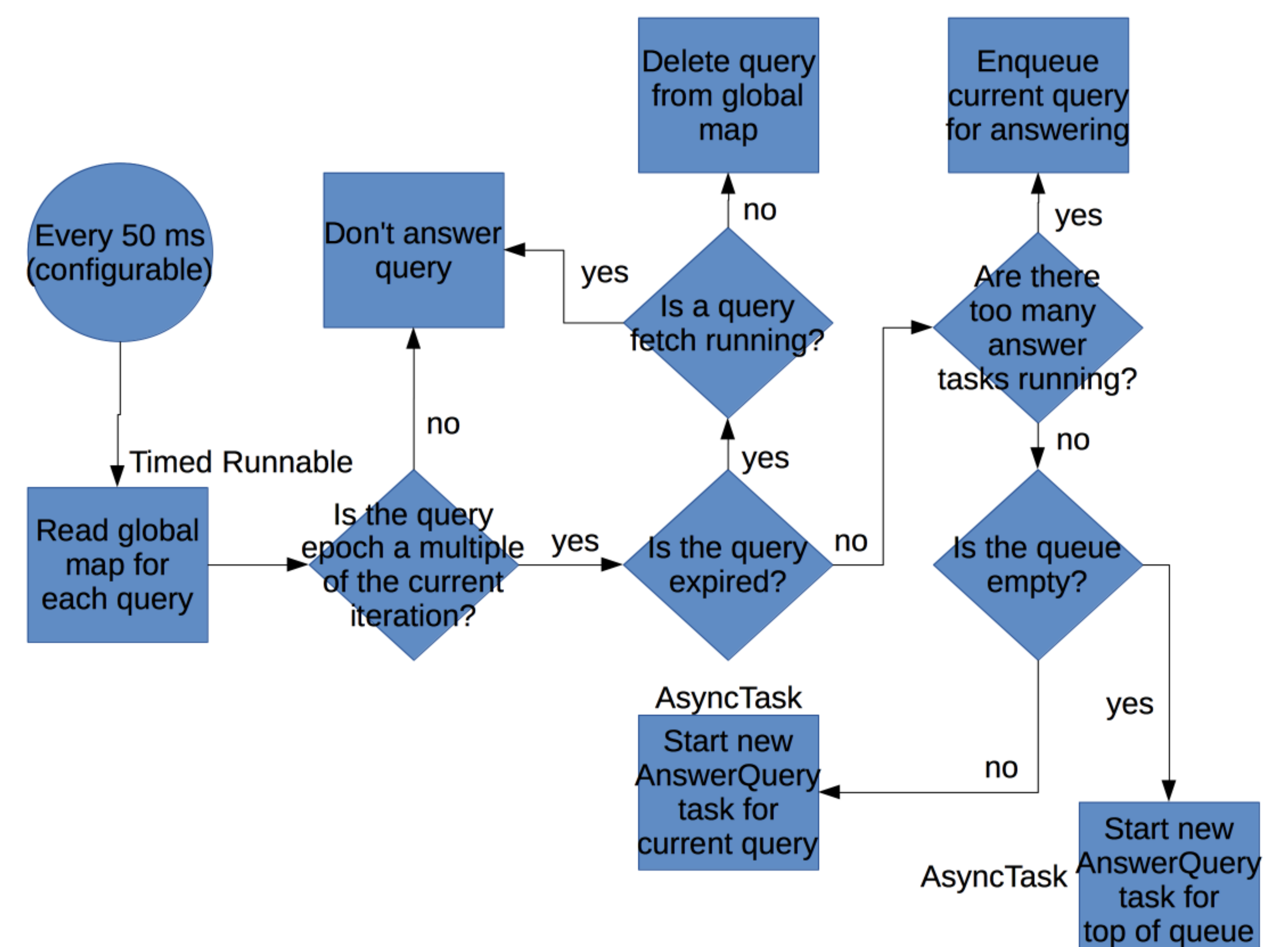
Contributions: Energy-efficient and Privacy-preserving Mobile Apps

	Waze	Crowdzen
Energy (Watts)	2.177	0.017
Evaluation Period	65.5 hours	

Energy (Watts) 2.177 0.017

Evaluation Period 65.5 hours

Design: Query Response



Design: Query Fetch

