



Distributed Earthquake Early Warning

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Background

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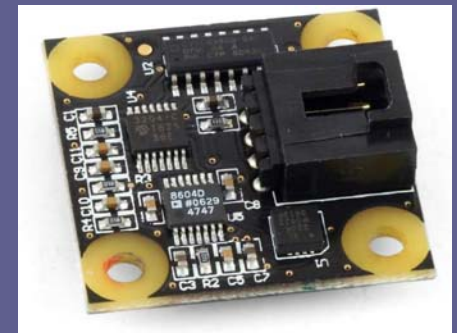
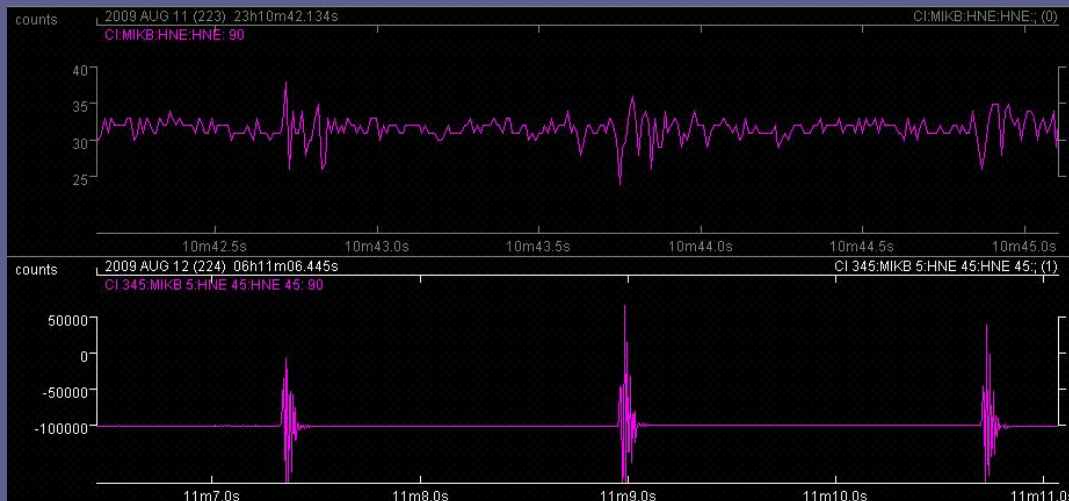
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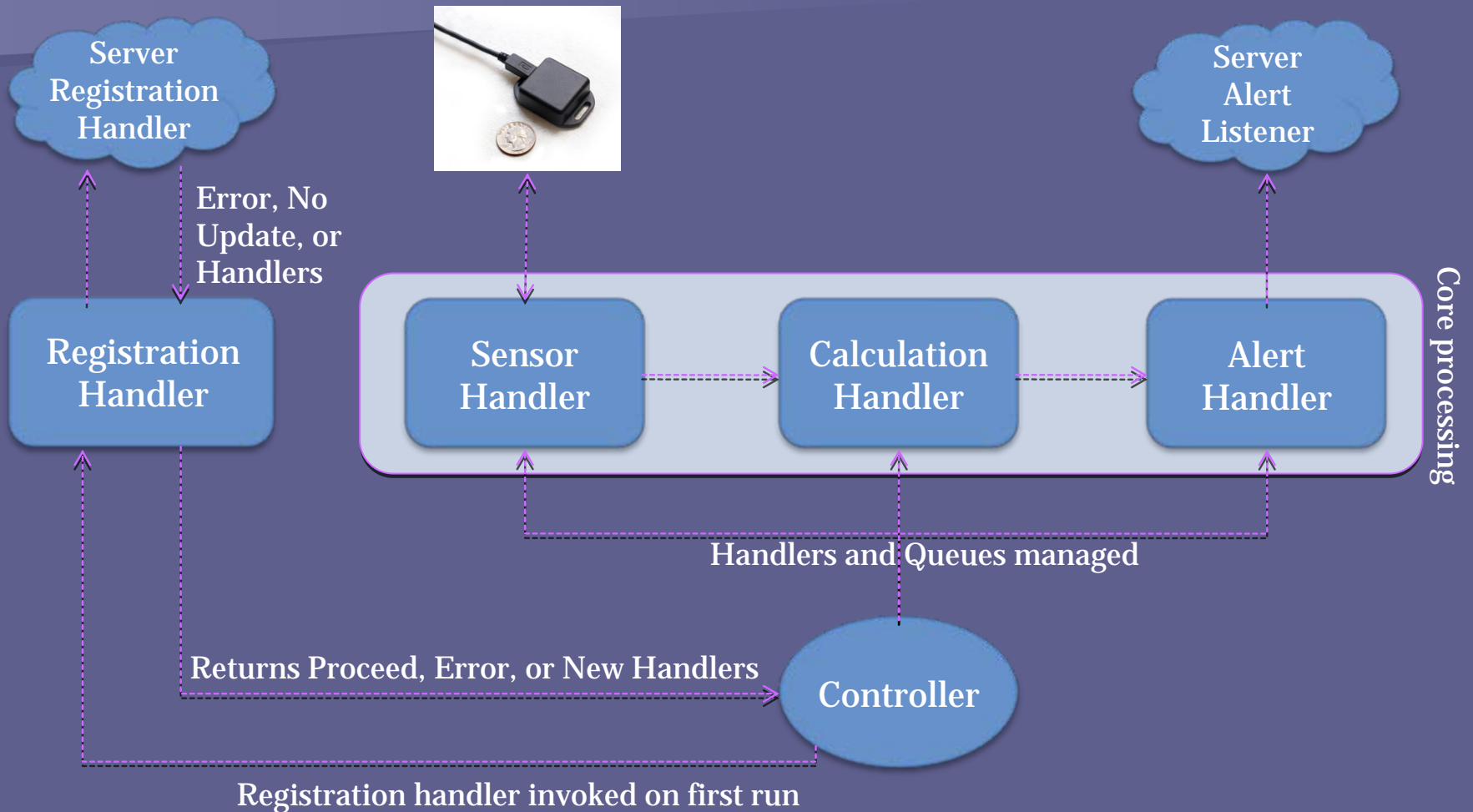
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- Current seismic network is too sparse

A New Seismic Network

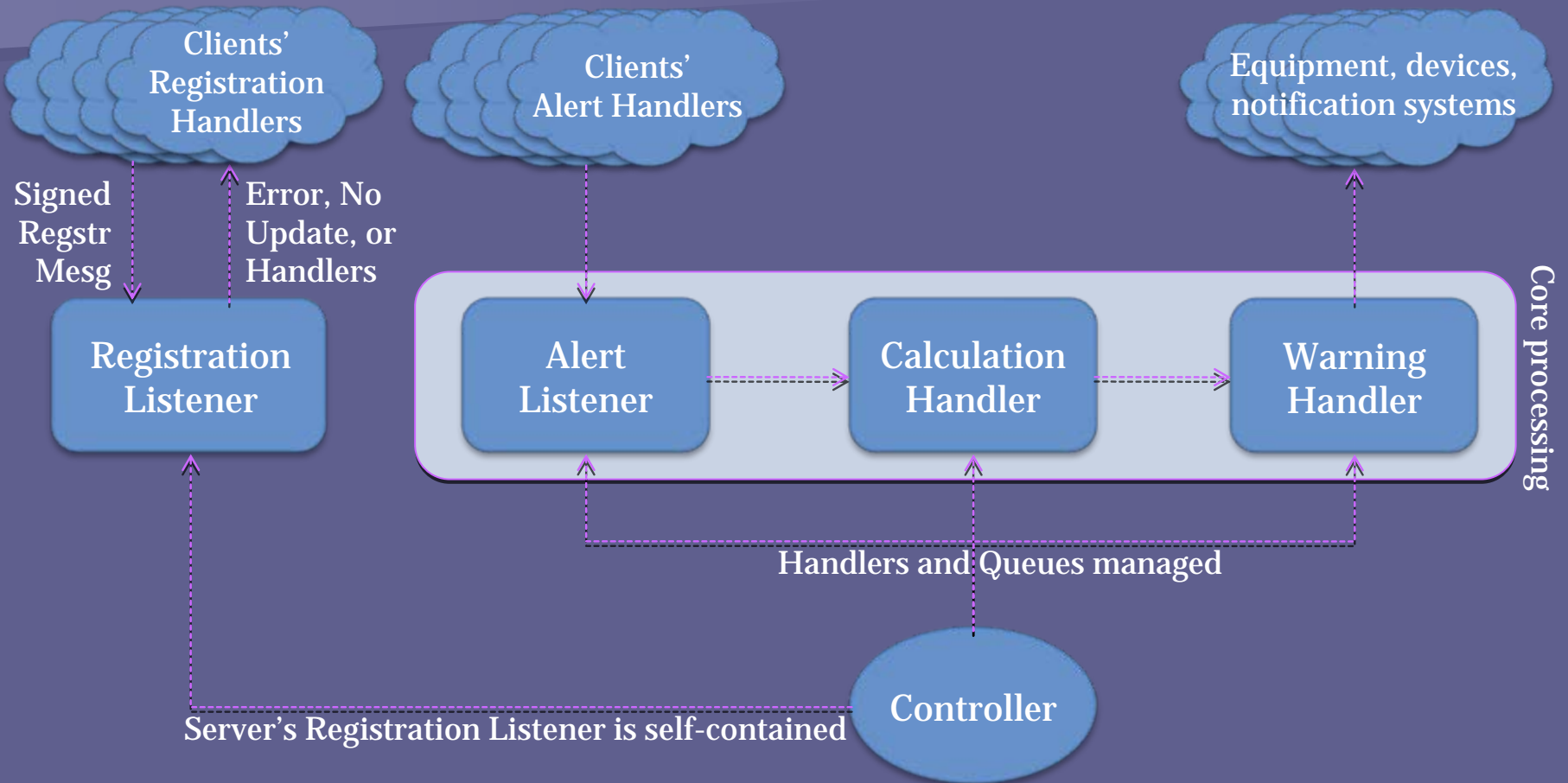
- A global distributed seismic network for early warning
- Small, inexpensive USB accelerometers
- Analysis done on central servers
- Early warning alerts
- Google maps web interface



Client Operation



Server Operation



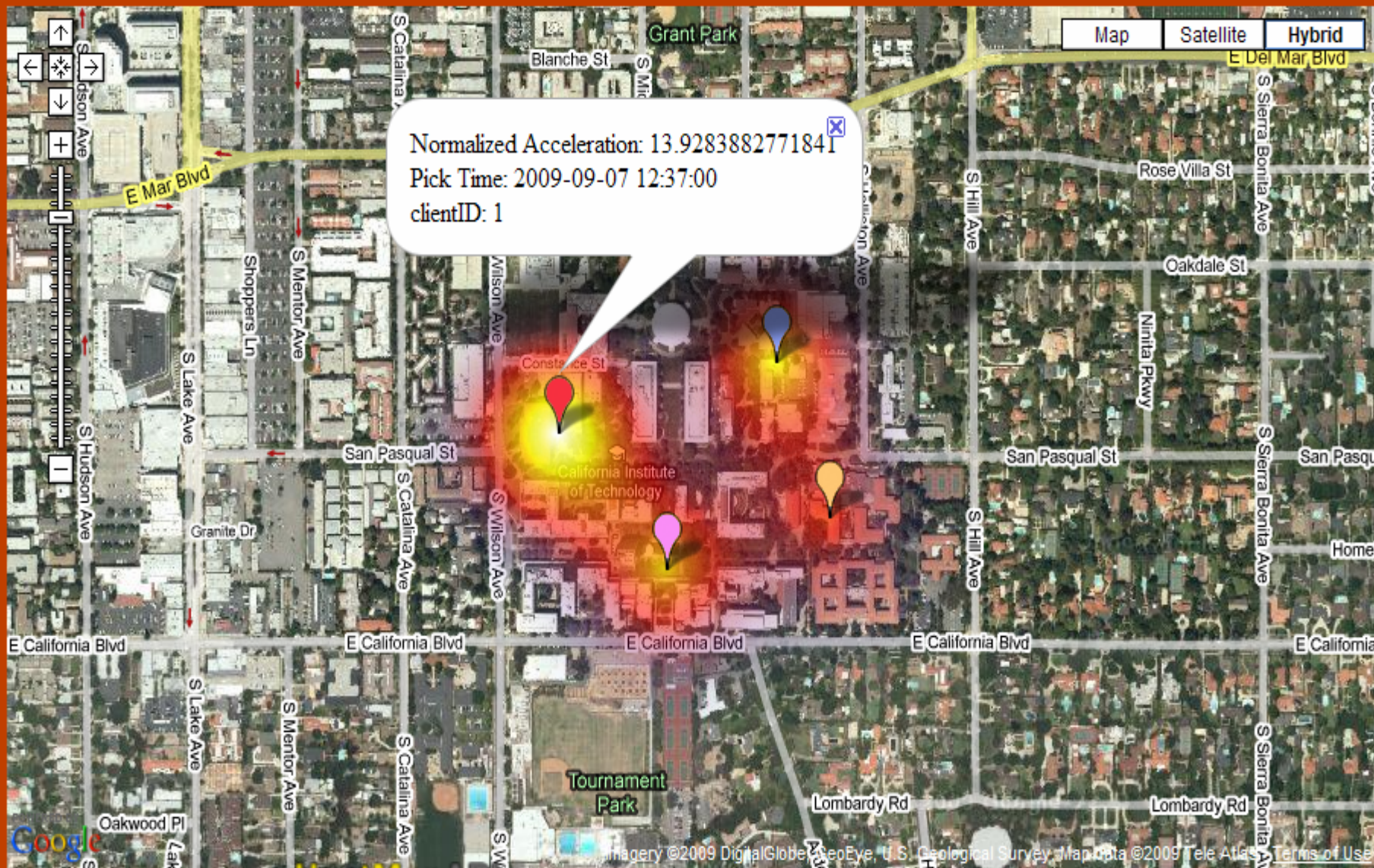
Server-side Analysis





- Bayesian decision theory

Server-side Analysis

- Bayesian decision theory

$$P(I, L, T|D) = \frac{P(D|I, L, T)P(I, L, T)}{P(D)}$$



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Thank You

Q&A Session