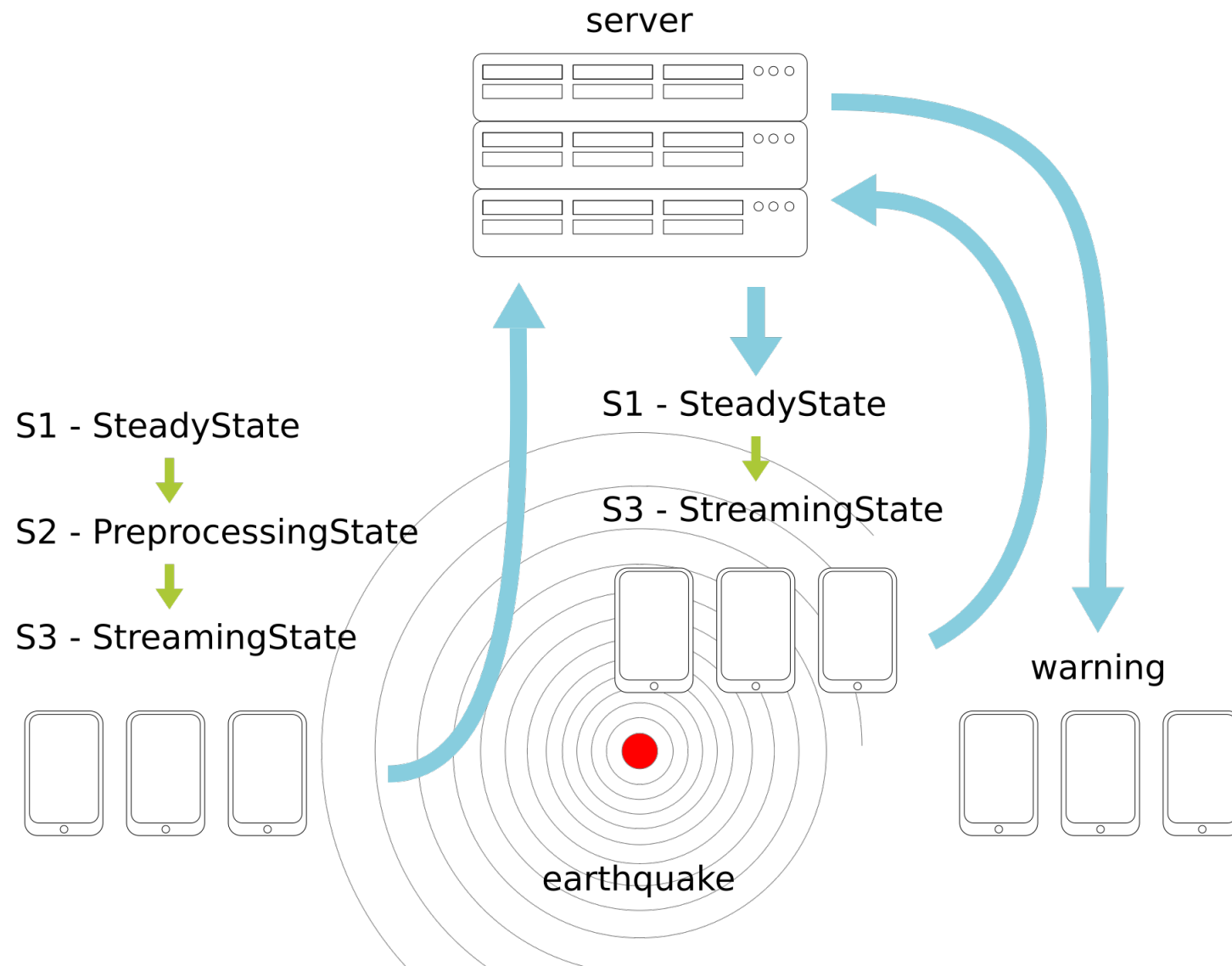


MyShake

Architecture

- Local device and backend decide about the current state of the running application.
- Activity States
 - SteadyState → no user activity
 - PreProcessingState → collecting data
 - StreamingState → send data to server
 - TriggerState → earthquake warning
- device can notify backend about possible EQ-activity
- backend can switch devices state

Architecture



Calculated features of accelerometer data

- Interquartile range
- Maximum Zero-crossing rate
- Cumulative Absolute Velocity of Acceleration Vector Sum

We are lacking good training data, hence we do not have an adequate local classifier for reliable detection.